Volume IV

# USAID/INDIA
# REFORM PROJECT
# COMPENDIUM WITH PRACTITIONERS' GUIDE

To State Fiscal Management Reform

# The Debt & Investment Management Practitioners' Guide

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# REFORM Project: Rationale, Objective & Terms of Reference

**The REFORM Vision ......**

*"State governments have the necessary organizational structures, analytical tools and decision-making processes, information sources and trained staff that enable them to make better informed choices on a transparent and accountable basis with respect to state public finances. Subsequently, this capacity is institutionalized into the mainstream of state government practices to ensure the sustainability of the effort."*

## The Rationale:

The starting point of the USAID/India Fiscal Management Reform Project (REFORM) is that the fiscal distress seen at the state level in early 2000 was, to a large extent, a result of the systemic weaknesses in state fiscal management (Box 1), including within the key departments of finance and planning. This prevented forward-looking fiscal decision-making grounded in careful analysis and leading to good governance. In short, the majority of Indian states needed better analytical capacity backed by appropriate institutional infrastructure to formulate and implement good fiscal policy.

**Box 1: Systemic Weaknesses in Fiscal Management**

The systemic weaknesses found in fiscal management at the state level may be described as "inadequate":

- Technical know-how in modern fiscal management practices.
- Comprehensive, current information databases.
- Robust analytical tools and techniques that correspond to internationally accepted standards.
- Integrated management information systems and systematic approaches to the fiscal decision-making processes.
- Transparent, consistent and institutionalized fiscal practices, reporting systems, and structures that promote the desired accountability for the effective and efficient mobilization, allocation and utilization of public funds.

Currently, therefore, many Indian states do not have the *appropriate capacity*[1] and the *necessary practices*[2] to perform relevant, economic and statistical analyses (Box 2).

**Box 2: Consequence of Systemic Weaknesses**

As a consequence of the systemic weaknesses, most Indian states, for example, have inadequate fiscal management expertise and institutional infrastructure to perform revenue and expenditure projections and distributional analysis, assess multiplier and elasticity effects, and run policy simulation and develop alternative policy scenarios. This includes their inability to establish strong links between budgetary outlays and program outcomes for efficient and effective delivery of results, establish debt and investment frameworks to improve their quality and profile, and conduct rigorous project appraisals to ensure selection of socio-economically viable projects.

[1] i.e., fiscal management skill-sets, tools and techniques and organizational structures.
[2] i.e., consistent, transparent and accountable processes.

Given increasing decentralization and the continued significance of public finance in India, many state governments will be required to assume greater responsibility for the design and implementation of their own development strategies. As a result, their ability to strike the *right balance between fiscal policy, broad-based growth, and financial sustainability* will be fundamental to promoting and sustaining development across every sector of the state economy and, consequently, the nation as a whole, especially in light of the new challenges posed by the opening-up of the Indian economy and state finances getting substantially linked with market forces.

## The Objective:

As a response, USAID/India's REFORM project (September 2003-2008) was designed to provide practical hands-on "how to" skills transferal, based on international best practices, to strengthen fiscal analytical expertise, structures and systems of selected Indian states. The objective was to help these states to better plan and manage their public finances, especially in the light of the challenges they faced following the 2000-01 fiscal crisis. Jharkhand, Karnataka, and Uttarakhand were identified as the three REFORM partner states.

The specific objectives of REFORM were:

1) To improve "informed" decision-making within state (sub-national) governments;
2) To ensure that decision-making processes followed consistent and transparent principles, leading to greater accountability; and
3) To sustain the efforts by institutionalizing and mainstreaming the capacity built.

> *REFORM, therefore, was not designed to advise or guide Indian state governments on specific policy decisions but rather to enhance their ability to evaluate and to address crucial policy choices and implementation options, based on an understanding of the environment - i.e., its potentials, its limits and its perceived needs.*[3]

## Terms of Reference:

Based on discussions with the respective partner states, the REFORM terms of reference were to help enhance their fiscal management capacity in the following four (4) areas:

- *Revenue Management Capacity* – To help states undertake detailed analysis of revenue projections and the implications of alternative tax policies and revenue choices. Interventions included: Introduction of improved revenue forecasting methodologies, an Input-Output (I-O) framework and macro-economic database. A practitioners' guide was also developed along with hands-on training to build state capacity in the above areas.

[3] Capacity-building as defined by the United Nations Center for Education and Development, (Agenda 21's definition, Chapter 37, UNCED, 1992).

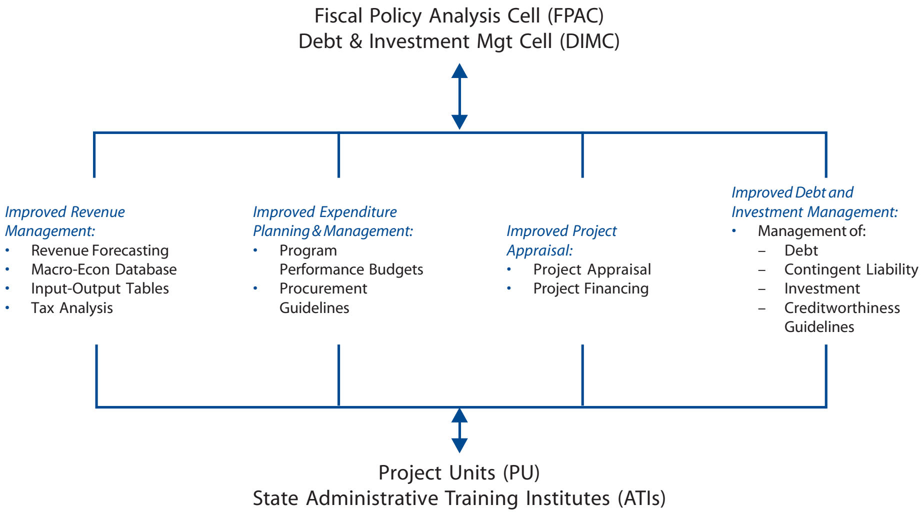
- *Expenditure Planning and Management Capacity* – To help states improve quality and accountability of expenditures. Interventions included: Introduction of an outlays to outcomes budgeting methodology (*i.e.*, program performance budgeting (PPB)) to help states' prioritize the allocation of public funds, improve program planning, monitoring and evaluation, increase transparency, accountability, and consequently, the quality of public services delivery. A practitioners' guide with related software was developed and delivered. Structured/hands-on training was provided across all levels and in almost all departments. Detailed public procurement guidelines were also developed for two out of the three states.
- *Debt and Investment Management Capacity* – To help states to better document, track, analyze, and manage debt, contingent liabilities and investments, in the medium to long term. Interventions included structured and hands-on training as well as introduction of practical guides (with reporting templates). Comprehensive debt datasets were developed and migrated into a database using the *Commonwealth Secretariat-Debt Recording and Management System (CS-DRMS)* software.
- *Project Appraisal Capacity* – To help states improve appraisal and selection of socio-economically viable capital projects. Interventions included: Training in the Harberger project appraisal technique which involves financial, economic, social and stakeholders' risks analysis. A Project Appraisal practitioners' guide with sector-specific guidelines was also developed and introduced to serve as a desk reference.

To sustain and mainstream the above fiscal management reform efforts, four (4) institutional structures were designed and supported:

- The Fiscal Policy Analysis Cell (FPAC) – To help states institutionalize continuous analysis of the implications of policies, procedures and regulatory decisions on the fiscal health of the states. An analytic unit supported by a team of dedicated and trained staff, with access to relevant and quality data, tools and techniques was established.
- The Debt and Investment Management Cell (DMIC) – To help states identify, generate, and analyze data and support more effective and prudent debt/investment decision-making. Similar to the FPAC, an analytic unit supported by a team of dedicated and trained staff, with access to relevant and quality data, tools and techniques was established.
- Project Unit (PU) – To help states offer a comprehensive range of services from project appraisal and monitoring, to final end-of-project evaluation, a project unit was designed that would also help promote public-private partnerships (PPPs).
- Administrative Training Institutes (ATIs) and State Institutes for Rural Development (SIRDs) – To help state civil service training institutes (ATIs and SIRDs) train entry level and mid-career state civil servants in fiscal planning and management, training courses; training materials and reference guides were developed and provided.

The REFORM project may therefore be considered as four-by-four (4x4), consisting of four intervention areas (expenditure, revenue, project appraisal, and debt and investment management) supported by four institutional structures (FPAC, DMIC, PUs, and ATIs/SIRDs).

### REFORM: Four-by-Four




## The Final Products:

A project *Compendium with Practitioners' Guides* was developed under REFORM to assist state governments to implement necessary fiscal management practices in the areas of forecasting, budgeting, tracking of debt and investment, and improving project appraisal techniques. Specifically, these Guides were developed to function both as desk references for government officers earlier trained under REFORM as well as training tools for strengthening capacity of new officers. For officers not earlier exposed to the new fiscal practices, the Guides will need to be supplemented with additional technical support or guidance.

The Compendium also includes a variety of case studies including the experiences of the three REFORM partner states – Jharkhand, Karnataka, and Uttarakhand – with respect to the implementing the new practices under REFORM.

*"Fiscal Watch"*, a virtual resource center, has also been designed and launched to provide a dedicated site to promote greater thinking, collaboration, discussions, best practices and, exchange information and post current data on the fiscal health (and related issues) of Indian states and India. The key feature of "Fiscal Watch" is the dedicated discussion forums to facilitate interaction between fiscal practitioners, both Indian and international (*e.g.*, to provide a platform for finance secretaries, budget officers, revenue officials, and researchers). In addition, there are numerous hyperlinks to related online resources such as government websites, professional societies, consultancy opportunities, and training and education providers.

## To Conclude:

Despite spending large sums of money, governments and donors in many countries have been limited in their ability to develop successful, sustainable programs due to the inadequacy of fiscal management expertise and infrastructure. Such inadequacies prevent the productive absorption of funds. They also prevent states from equipping themselves with the necessary fiscal shock absorbers to cushion them against unexpected fiscal challenges - some arising out of discretionary, unplanned decision-making and others as a result of increased globalization. More often than not, these unexpected challenges can and have served as the tipping points, seriously affecting the fiscal condition of even fiscally healthy states, as seen in India especially post 1995-96.

However, given the increasing recognition by state governments of the role of and need for improved fiscal management capacity in Indian states' development process, and indeed for India as a nation, we are confident that endeavors such REFORM will be sustained and further strengthened.

Madhumita Gupta, Team Leader REFORM, USAID/India

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# Acronyms and Abbreviations

| | |
|---|---|
| **BAN** | Bond Anticipation Notes |
| **CAG** | Comptroller and Auditor General |
| **CCIL** | Clearing Corporation of India Limited |
| **CDs** | Certificate of Deposits |
| **CDS** | Credit Default Swaps |
| **CPs** | Commercial Papers |
| **DS** | Debt Service |
| **DvP** | Delivery Vs. Payment |
| **EBITDA** | Earnings Before Interest, Taxes, Depreciation and Amortization |
| **FD** | Fiscal Deficit |
| **FIIs** | Foreign Institutional Investors |
| **FRAs** | Forward Rate Agreements |
| **FRBs** | Floating Rate Bonds |
| **FRL** | Fiscal Responsibility Legislation |
| **FRBM** | Fiscal Responsibility and Budget Management |
| **FY** | Fiscal Year |
| **GAAP** | Generally Accepted Accounting Practices |
| **GDP** | Gross Domestic Product |
| **GFD** | Gross Fiscal Deficit |
| **GIC** | General Insurance Corporation |
| **GICs** | Guaranteed Investment Contracts |
| **GoI** | Government of India |
| **GRF** | Guarantee Redemption Fund |
| **GSDP** | Gross State Domestic Product |
| **IAS** | International Accounting Standards |
| **INR** | Rupees (Unit of Currency) |
| **IP** | Interest Payment |
| **IRC** | Irrevocable Revolving Credit Arrangements |
| **IRS** | Investment Rate Swaps |
| **LIC** | Life Insurance Corporation |
| **MoF** | Ministry of Finance |
| **NABARD** | National Bank for Agricultural and Rural Development |
| **NACSLB** | National Advisory Council on State and Local Budgeting |
| **NBFCs** | Non-Banking Financial Companies |
| **NCDC** | National Cooperative Development Corporation |
| **NDS** | Negotiated Dealing System |
| **NEAT** | National Stock Exchange for Automated Trading |
| **NSE** | National Stock Exchange |
| **NSSF** | National Small Saving Fund |
| **ONTR** | Own Non Tax Revenue |
| **OTC** | Over the Counter |
| **OTR** | Own Tax Revenue |
| **PD** | Primary Deficit |
| **PDO** | Public Debt Office |
| **PF** | Provident Fund |
| **PRB** | Primary Revenue Balance |
| **PRG** | Partial Risk Guarantee |
| **PRI** | Political Risk Insurance |
| **PSE** | Public Service Enterprise |
| **R-G** | Rate of Interest minus Growth |
| **RBI** | Reserve Bank of India |
| **RD** | Revenue Deficit |
| **RE** | Revised Estimate |
| **REC** | Rural Electrification Corporation |
| **REPO** | Buyback Transactions |
| **RRB** | Regional Rural Banks |
| **RR** | Revenue Receipt |
| **RTGS** | Real Time Gross Settlement System |
| **SEBI** | Securities and Exchange Board of India |
| **SGL** | Subsidiary General Ledger |
| **SLR** | Statutory Liquidity Ratio |
| **SO** | Structured Obligations |
| **SPV** | Special Purpose Vehicles |
| **STCI** | Securities and Trading Corporation of India |
| **StP** | Straight through Processing |
| **TAN** | Tax Anticipation Notes |
| **TFC** | Twelfth Finance Commission |
| **TRAN** | Tax and Revenue Anticipation Notes |
| **TRR** | Total Revenue Receipts |
| **WDM** | Wholesale Debt Market |
| **WMA** | Ways and Means Advances |

# Authors' Note

## Why develop this Guidebook?

The purpose of this Debt Guidebook is to help an Indian State Government to improve their credit rating as a precursor to entering the debt market to raise capital.

## What is the Guidebook?

This Debt Guidebook is a supplement to training of those employees who are not familiar with debt, investment or guarantee management. It helps employees of the operating departments understand public sector debt management by describing international debt management tools and techniques.

## When to use the Guidebook?

Once a state government has decided to go to market to raise capital, the state can use the Debt Guidebook as aide in how to improve its credit rating, debt management processes, and organizational infrastructure.

## Who should use the Guidebook?

This Debt Guidebook is helpful to: those who will be responsible for maintaining the state credit rating, and portfolio of debts, investments, and guarantees. It is also useful as a reference to other state decision-makers who will be considering the assumption of debt.

## How to use the Guidebook?

The Guidebook serves as a baseline tool to assist state governments to implement necessary fiscal management reform. The compendium includes guidelines for on-the-ground implementation of international best practices by state officials in the areas of forecasting, budgeting, tracking of debt and investment, and improved project appraisal. These guidelines have been developed with the aim of serving both as desk references for government officials already trained in the respective fiscal competency as well as training tools for structured capacity-strengthening programs. For officials not already exposed to the fiscal practices introduced under REFORM, the guidelines will need to be supplemented with technical support or guidance.

# Executive Summary

State government market borrowing has largely been limited through the Reserve Bank of India (RBI). However, the Twelfth Finance Commission recommendation to discontinue central government loans to state governments for plan funding will require Indian states to mobilize larger resources from the market. The challenge to raise funds from the market by state governments comes at a time of transition and uncertainty. The central underlying issue in this Guide is states accessing the market and the need for improving creditworthiness to facilitate access to market on their own.

A critical concern is how to increase the access of state governments to financial markets, broadly defined as the banking system and the securities market. Credit market access has been approached from various angles in this States Going to Market and Creditworthiness Guide ("Guide") including: the changing nature of Indian state government borrowing, state debt management operations, mechanisms to enter the nonSLR bond market, and the organization and regulation of the financial market. Other areas that are reviewed include the likely investor groups, the need for information to analyze credit, credit rating and finally, private insurance (or enhancement) of state government securities.

This Guide explores the market for state government debt in the Indian context and is presented in six parts. The first five parts establish a framework for understanding the debt market in the Indian context and the manner in which the current debt market functions, the market structure, operation and regulations, the kinds of security instruments that are available, and the main participants in the market. In these sections, the mechanisms for states going to market on their own, state creditworthiness, and monitoring of oversight of state debt is brought into focus. The final section provides general guidelines and recommendations.

While there is no one right way of developing and expanding the Indian state government securities market, there are ways to facilitate the success of a state government bond market including:

- The financial marketplace should be free to work with state governments to decide on the types of instruments and associated payment structures to employ;
- Wherever possible, it is best to introduce and promote competition into the state securities market; and
- Public and timely reporting on the terms, conditions and other provisions of loans and bond offerings is a necessary complement to supporting a competitive state securities market regime.

Information and state government accountability are key factors in the effective operation of state debt markets. Assessment of risk, crucial for determining the cost of capital, requires state governments to produce reliable, complete and timely financial information. Without the discipline of the hard budget constraint, financial markets and credit assessors have little reason to distinguish among the various state government credits, and the rationale for market allocation of resources is consequently lost.

## Introduction — Subnational Borrowing

The present challenge for Indian state governments to raise funds from the market on their own comes at a time of transition and uncertainty. The changes in governance and dispersal of fiscal decision making are increasingly devolving responsibility for meeting capital needs to state governments. Concurrently, there is increasing pressure to make government at all levels accountable to its citizens and more attuned to the demands of the marketplace.

A critical issue in this transfer of responsibility from the central to state governments is how to increase the access of subnational (state) governments to financial markets, broadly defined as the banking system and the securities market. Financial market is simply a system of borrowers and lenders and credit allocation based on pricing decisions that balance supply and demand. In addition, a broad-based financial market implies an array of alternatives for accessing capital funds.

### Nature of Subnational Borrowing

Countries differ in the role that subnational governments have in financial markets and in the nature of their financial markets. Whatever the goals of greater autonomy and capacity at the subnational level, subnational governments vary greatly in political power and decision making authority. This, in part, reflects differences among unitary states, hierarchical federal states and governance systems that recognize separate spheres for each level. These differences are embedded in the constitutions and legal systems that condition the degree to which subnational governments are free to act and to control the resources with which to act.[4]

The literature pertaining to subnational borrowing or subnational creditworthiness or for that matter subnational debt market development in the context of developing countries has tended to remain focused on the problem of municipal debt market development or municipal creditworthiness. However, the scope of this "States Going to Market and Creditworthiness Guide" is different in the sense that this discussion focuses on the second tier of government, the states in India and not the third tier (i.e., the municipal bodies).

Market borrowings by states already exist. However, these market borrowings are undertaken by RBI on behalf of the states. State government bonds are treated as statutory liquidity ratio (SLR) securities, thus providing a captive market for state bond issues. However, in the future, this will change. Accessing the market by state son their own strength is not easy. This requires state governments to build up capacity within each state to assess their own borrowing requirements, to manage their debt more effectively, and to undertake the actual operation of borrowing by engaging private merchant bankers, and to service creditors. Equally important, this presupposes the taking up of a series of measures to make the state creditworthy.

[4] See Mila Freire and John Peterson (ed.) Subnational Capital Markets in Developing Countries published by the WB and Oxford University Press, Introductory Chapter.

### Indian State Governments to Access Capital Market on their Own

The central government, based on the recommendation of the Twelfth Finance Commission (TFC) has stopped central loans for plan funding of the states since the Budget 2005-06. TFC has prompted changes in the manner in which Indian states borrow. Under the newly modified state borrowing environment, as the central government ceased lending to state governments, the amount of state government market borrowing will, in all likelihood, increase. By resorting to larger market borrowings, state governments will now be exposed to market discipline and scrutiny.

The Government of India appointed a technical group under the Chairmanship of Ms. Shyamala Gopinath, Deputy Governor, Reserve Bank of India (RBI) to suggest the transitional arrangements for state market borrowings. The group has since submitted its report. Based on its recommendations, a Standing Technical Committee is being constituted under the aegis of Finance Secretaries Conference with representation from the central and state governments and the RBI to advise on the next steps in this regard.

### The Analytical Framework

This "States Going to Market and Creditworthiness Guide" ("Guide") explores the market for state government debt in the Indian context. This Guide is developed with the following two basic objectives of (i) guidelines for developing the creditworthiness of the state governments; and (ii) mechanism to approach the market on stand alone strength. Excluding this brief introductory section, the Guide has six parts. The first five parts establish a framework for understanding the debt market in the Indian context and the manner in which the current credit market functions, the market structure, operation and regulations, the kinds of credit instruments and security instruments that are available, and the main participants in the market. In these sections, the determination of state creditworthiness and monitoring of oversight of state debt is brought into focus. Finally, Part 6 provides guidelines and recommendations.

## Section I: Review of Indian State Government Borrowing

Credit needs and market structures vary greatly and depend on the political, fiscal, financial and legal settings in which they are imbedded. Part 1 provides a review of the current and medium term system of borrowing by state governments in India and the current situation of Indian state finances. Recent developments in state government borrowing and the future scenario of state government borrowing are also discussed.

## Section II: State Debt Management Operations

Fiscal capacity and financial acumen of subnational jurisdictions are fundamental considerations in determining which entities are candidates for borrowing. Although these are not always correlated with size, private creditors generally prefer larger jurisdictions because of their better sophistication, ability to draw on more resources, and ability to spread the fixed costs of debt transactions over larger volumes of borrowing. Part 1 provides a brief overview of current Indian state government debt management operation practices, looking at shortcomings, and providing parameters for measuring effectiveness. Part 2 provides a snapshot for establishing a debt, investment and contingent guarantee monitoring unit (DIMC) within the various Indian state government Departments of Finance. As envisioned, a DIMC could be established at the state government level to ensure better recording, transparency and monitoring the state government portfolio of debt, guarantees, and investment operations.

## Section III: The Importance of Credit Ratings

Credit risk is the risk arising due to uncertainty in a borrower's ability to meet its obligations. Because there are many types of counterparties from individuals to sovereign and subsovereign governments and several different types of obligations from personal loans to derivative transactions, credit risk takes many forms. Part 1 discusses the means, surveillance, analysis and importance of state government debt by credit rating organizations. Part 2 reviews the role of credit rating agencies as states go to market on their own. In effect, the information produced by state government credit ratings (and, any subsequent monitoring program) can be useful to government officials and purchasers of government securities at all institutional and investment levels.

## Section IV: Mechanisms to Enter Non Statutory Liquidity Ratio (SLR) Bond Market

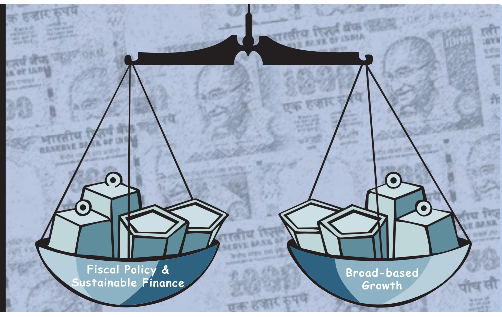
Borrowing is at the centre of any economic activity played out in financial markets. Part 1 examines the nature of borrowing instruments (e.g. general obligation bond, revenue bond), their technical design (maturity, payment schemes) and the method by which they are offered to the market. In addition, Part 1 lays the foundations of the kind of borrowing that may be undertaken by state governments and explore the nature of financial and real (asset) resources that may be pledged to repay indebtedness. Parts 2 and 3 provide the structure, operation and the guiding principles of approaching the market by a subsovereign entity. The marketing process for state nonSLR bonds and the nature of required specialized services for entering into the competitive and negotiated path for debt issuance is reviewed.

## Section V: Evaluation and Monitoring Oversight

The political and financial relationships between central, state and local governments are rich and varied. These relationships are evolving along new lines, many of them unique to a given country's tradition and position along the decentralization (and, devolutionary) scale. National government oversight and intervention in state government financial systems vary fundamentally in federal systems, which leave important prerogatives to the states, and in unitary governments, which have strong sovereign centers. Part 1 reviews the various best practice methods available for improving the debt position of subnational governments. The information produced in a good debt monitoring scheme is useful for state officials but also private lenders. Efforts to regularize and harmonize reporting and improve its content are indispensable to state government debt market development.

## Section VI: Guidelines and Recommendations

State government borrowing is not an end in itself. Ideally, it should be used to obtain long-term capital for expenditures that provide benefits that stretch into the future. Repaying state government debt represents the fulfilling of an intergenerational contract obligating those who benefit from the capital investment to pay their share of the costs. Part 1, therefore, provides guidelines and recommendations for developing a more efficient and liquid market for Indian state government securities.




Section I

# Review of Indian State Government Borrowing

**Part 1:**

# Indian State Government Borrowing

In this Part, we discuss the regulatory, institutional and administrative aspects with regard to the current state government borrowing as well as its monitoring. This Part highlights the relevant constitutional provisions dealing with state government borrowing and discusses the current role of the central government and the Reserve Bank of India (RBI) in facilitating state borrowing. After discussing the changing pattern of state government borrowing, the Part dwells on the possibility of the states going in for borrowing through nonSLR bonds in the future.

## The Constitutional Provision

For reasons of macroeconomic control, borrowing by subnational governments in any federal setting is subordinated to prior approval by the national government. In India, this subordination is enshrined under Article 293 of the Constitution. As per this provision, states are not allowed to borrow directly from external sources and require the central government permission to raise domestic loans so long as they are indebted to the Centre or taken guarantees from the Centre for loans raised by them. Box 1.1 presents the relevant details of this Article.

### Box 1.1: Provision under Article 293 of Indian Constitution

1) Subject to the provisions of this article, the executive power of a state extends to borrowing within the territory of India upon the security of the Consolidated Fund of the state within such limits, if any, as may from time to time be fixed by the Legislature of such state by law and to giving of guarantees within such limits, if any, as may be so fixed.
2) The Government of India may, subject to such conditions as may be laid down by or under any law made by Parliament, make loans to any state or, so long as any limits fixed under Article 292 are not exceeded, give guarantees in respect of loans raised by any state, and any sums required for the purpose of making such loans shall be charged on the Consolidated Fund of India.
3) A state may not without the consent of the Government of India raise any loan if there is still outstanding any part of a loan which has been made to the state by the Government of India or by its predecessor government, or in respect of which a guarantee has been given by the Government of India or by its predecessor government.
4) A consent under clause (3) may be granted subject to such conditions, if any, as the Government of India may think fit to impose.

Source: Constitution of India.

In the year, 2001, during the region of the States Fiscal Reform Facility, the off-budget borrowings of State Governments through SPVs was also brought in the ambit of Article 293(3) of the Constitution. In the wake of rapidly increasing level of guarantees by State Governments, GoI was compelled to issue guidelines to advise State Governments to obtain prior approval before resorting to SPV borrowing.

States were also advised to obtain credit rating for SPV borrowing for any new project. In parallel, RBI also advised banks and financial institutions to exercise due diligence while lending for any specific project of State-owned PSUs and not to lend solely on the strength of State Government guarantees. This was the first conscious step by the GoI to bring the off-budget borrowings of State Governments into the Constitutional provisions and extending initial measures to increase the creditworthiness of State Government borrowing.

## The Role of Central Government and RBI

Central Planning Commission determines the annual plan size of each state in consultation with that state and the central Ministry of Finance and indicates the financing scheme to the state. The scheme of finance for the state includes borrowing in the form of central loans (which ceased from 2005-06 following TFC recommendations), securities issued against NSSF, provident fund, market borrowing, borrowing from central financial institutions (negotiated loans), etc. The Department of Expenditure under the central Ministry of Finance accords permission to states for raising borrowings under the various heads as provided in the annual scheme of financing of the state Plan. As per the present policy of GoI, a State Government has no control over the flow of borrowing from public account. NSSF proceeds are automatically transferred to the States as per the prevailing norm.

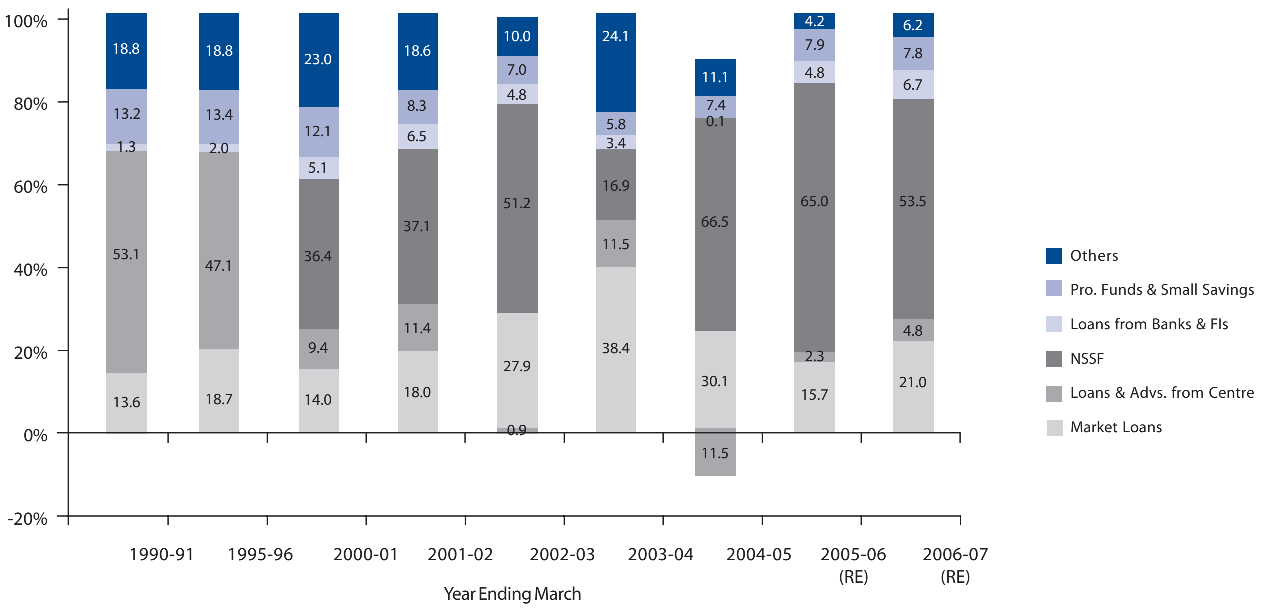
The Reserve Bank of India acts as the banker/merchant banker and debt manager of states on the basis of an agreement signed between the state and the RBI. As per this agreement, the RBI performs the following functions:

- Advises state governments on its market borrowing program;
- Undertakes market borrowing for states through tap/auction route;
- Service the debt of state governments by deducting from state balances with RBI; and
- RBI also provides ways and means advances.

## State Government Borrowing Profile

Figure 1.1 provides an idea of the movement of shares of major sources of loans to the state governments. The composition of state borrowings has undergone significant changes.

**Figure 1.1: Financing Pattern of Fiscal Deficit of States**




Source: Reserve Bank of India Annual Report 2005-06.

Central government loans which traditionally have dominated state borrowing declined in importance with the prepayment of over a lakhs crore of high-cost loans during the 2002-05 period (under the so-called "debt swap scheme").The NSSF loans have now become the dominant source of state government debt financing comprising up to 65 percent of the financing gap of states during 2004-07 (Figure 1.1).

The share of market borrowing through the RBI had risen considerably during the period of the debt swap (2002-05) as state governments were permitted by the centre to go in for additional market borrowing to prepay the high-cost central loans. Over 2005-07, the share of market loans remained subdued in the 15 to 20 percent range.

Loans from banks and financial institutions (also called "negotiated loans" from central financial institutions) have increased over the last three years with a share of 5 to 7 percent during 2005-07.

State provident funds and small savings constituted about 7 to 8 percent share during 2004-07. The share of other sources of state government borrowings consisting of a mix of reserve funds, deposits and advances, ways & means advances from RBI, contingency funds, etc. have come down drastically from 19-24 percent in earlier years to just about 4 to 6 percent during 2005-07.

## State Government Borrowing and NSSF

A quick review of recent state government borrowings illustrate that loans from the Centre have given way to two major borrowing sources: market borrowing and, loans from NSSF. Prior to 1999-00, the small savings funds were

**The composition of borrowing by Indian state governments has undergone significant changes in recent years. There has been significant decline in the share of loans and advances from the Centre from 57.4 percent in end-March 1991 to 22.4 percent in end-March 2006. Loans against securities issued to NSSF have become the predominant source of borrowing by states, financing about two-thirds of gross fiscal deficit during 2004-05 and 2005-06.**

transferred as loans from the central government. However, a separate account under the NSSF was created in 1999-00 and 100 percent of the funds from this account are directly channeled to state governments as loans since 2002-03. In 2006, state governments became increasingly reluctant to borrow from the NSSF because of its high coupon rate of 9.5 percent, which were much higher than the rate for market borrowing.

The central government is considering reducing the offtake of NSSF loans to state governments to 80 percent rather than existing 100 percent. Moreover, it has taken initiatives to make investments in NSSF less attractive by hiking the rates on bank term deposits and bringing them at par with the return on small savings (Monthly Income Scheme, Public Provident Fund, National Small Saving Scheme, National Savings Certificate, etc.). Further, the central government has already brought the bank term deposits under the investments in tax exemption category under Section 80C of the Income Tax Act. The Government of India has also removed the 10 percent lump sum bonus on the Monthly Income Scheme of Post Offices. This has shown immediate results. There has been a 30 percent reduction in investments in small savings during April to August 2006 compared to the same period of 2005. The amount of investment declined from INR 31488 crores to INR 21989 crores.

## The Banking System and SLR Regulation

The SLR Regulation has not only served the role of a monetary policy instrument for controlling the liquidity situation within the economy, it has also made available funds to the central and the state governments to finance investments in priority sectors. However, one of the major recommendations of the RBI Working Group on Harmonizing the Role and Operations of Development Financial Institutions and Banks (1998) has been to phase out SLR in line with international practice.[5] The Group recommended that there is a need to develop an alternative mechanism for financing specific sectors which require concessional funds which can be provided by specifically targeted subsidies rather than via statutory obligation on the entire banking system. Importantly, the Bill for amending the Banking Regulation Act proposes to empower the Reserve Bank of India to reduce the SLR from the current 25 percent and the government has introduced an ordinance in January 2007 in this regard.

## Is a Move from SLR to NonSLR Bond Issuance Foreseen?

As presented above, the composition of borrowing by Indian state governments has undergone significant changes in recent years. There has been significant decline in the share of loans and advances from the Centre from 57.4 percent in end-March 1991 to 22.4 percent in end-March 2006. Loans against securities issued to NSSF have become the predominant source of borrowing by states, financing about two-thirds of gross fiscal deficit during 2004-05 and 2005-06.

The scenario started changing in 2006-07 with a substantial decline in the inflow of small savings. This is caused by a number of factors like the removal of income tax benefits under these saving schemes, extension of tax benefits to fixed bank deposits of five years and above, increase of interest rates on bank deposits, and attractive returns from stock market and mutual funds. Besides, NSSF loans are a high-cost source of funds with interest rate at 9.5 percent while market borrowing can be had for below 8 percent. Net borrowing under NSSF is bound to decline sharply in the next three to four years as the five year moratorium on repayment of principal ending for the large gross inflows in the past few years.

State government bonds associated with market borrowing enjoy the status of being statutory liquidity ratio (SLR) securities. Commercial banks are required to invest a certain portion of their net demand and time liabilities (NDTL) in SLR securities, which are mainly the central and state government securities. The SLR requirements were raised in the 1970s and 1980s to support government's rising borrowing requirements. The SLR reached the peak level of 38.5 percent by 1992.

As a part of the reform process, SLR requirements were brought down successively to 25 percent by 1997. Nevertheless, bank holdings in government securities continued to remain considerably above the requirements.

[5] The Working Group also observed that the need for SLR has declined as a result of stringent asset classification and provisioning norms and Government borrowing at market determined rates.

Thus, by early October 2004, scheduled commercial banks actual holdings of government securities were around 40 percent of their NDTL as compared to the required 25 percent. This is due to the sluggish demand for bank credit from the corporate sector. The situation has, however, dramatically changed with commercial banks holding of government securities came down to 34.7 percent in October 2005 and further down to 29.8 percent in October 2006 as the demand for bank credit has surged. This may further decline as the corporate demand for bank loans is expected to remain strong in the short- to medium-term (Figure 1.2).

Another source of debt funds for the states is the negotiated loans from central financial institutions such as NABARD, HUDCO, LIC, GIC, REC, PFC and NCDC. These are specific-purpose institutions and the scope of large growth of borrowing from these institutions by states is rather limited. While plan loans from the Centre have stopped (from 2005-06), central loans will take the form of foreign loans from multilateral and bilateral donors. Although multilateral and bilateral loans have historically been routed through the central government, they will now be on the same terms and conditions as prescribed by the donors. However, the quantum and share of these loans is not expected to be large.

In the light of TFC recommendations, all states except the so-called weak and vulnerable states are to move to the market and borrow on their own in the near future. They will not have the comfort of the RBI conducting the borrowing and debt servicing on their behalf. State government debt will no longer enjoy SLR status.

## Indian State Government Bond Market: The Future

The Twelfth Finance Commission (TFC) has recommended that the states should graduate to market borrowing on their own strength.

**Figure 1.2: SLR Investments by Scheduled Commercial Banks**


Source: Extracted from RBI Mid-term Review 2006-07.

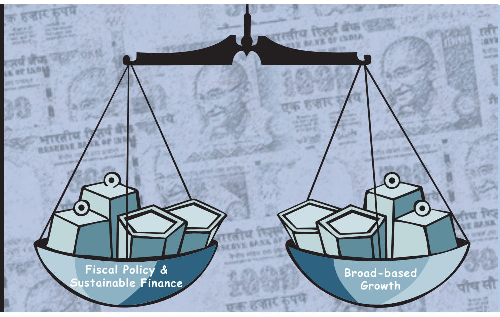
Keeping in view the discussions above, it has become imperative for the state governments to become creditworthy and get stand-alone investment grade credit rating in the event of any of the following things happening:

- In the situation of gradual move of RBI as an arranger of state governments "borrowing," even bond issuance eligible for SLR status may be managed by other private fund managers;
- Increasing share of market borrowing by state governments through auction route which would mean increasing interest spread between financially strong and less strong states;
- Accounting contingent liabilities arising out of off-budget borrowing as explicit liabilities of the state governments leading to revealing of a poor financial condition for the state;
- Removal of the SLR status of the state government bonds; and
- Further reduction and gradual removal of SLR by the RBI.

The Government of India has emphasized the need to develop the domestic corporate bond market. The R. H. Patil Committee Report has provided a plan of action for developing the corporate bond market. This would clearly help state governments to approach the corporate bond market for funds.

With this background the objective of this Guide is twofold:

- Provide a strategy to improve the creditworthiness of the state governments; and
- To provide a mechanism to approach the bond market for nonSLR bonds.




Section II

# State Debt Management Operations

**Part 1:**

# Improving State Finances

Fiscal capacity and financial acumen of subnational jurisdictions are fundamental considerations in determining which entities are candidates for borrowing. Although these are not always correlated with size, private creditors generally prefer larger jurisdictions because of their better sophistication, ability to draw on more resources, and ability to spread the fixed costs of debt transactions over larger volumes of borrowing. In most countries three groups of jurisdictions can be identified in terms of the likelihood for the issuance of subsovereign debt in private market:[6]

- Those that already have access to capital market;
- Those with limited or no access to capital markets; and
- Those that cannot generate sufficient revenue to meet their defined commitments and unable to access capital markets.

Jurisdictions in the first two groups have the potentiality to use private credit resources under a regime in which central government assistance to subnational market development is accommodative and indirect, focused on laws and regulations that create an enabling environment for subnational government borrowing in credit markets. Subnational governments in the third group, the very small and poorest governments, should not borrow in private credit market.

In India, while some state governments have the financial capacity to access capital market funds, they are not allowed due to the existing regulatory restrictions by the RBI and the Federal Government. However, state governments provide support to utility boards and special purpose vehicles through guarantees to facilitate accessing private credit market. This is a very common phenomenon. Nevertheless, there are over a dozen examples where urban local bodies (the weakest so far as the financial capacity is concerned) were allowed by state governments to go to the market to fund capital investments in urban basic services in India. Most of these urban local bodies issued general obligation bonds through private placements. This Part provides a detailed account of some of the shortcomings existing in the current state finances disclosure norms. As we shall see, these shortcomings make it very difficult to capture the true strength and weaknesses of state government financial picture.

## Current Practices and Shortcomings

A major issue of concern toward measuring the fiscal and financial performance of the state government is measuring the sustainability of its financial performance. This would require getting into the details of the nature of its liabilities rather than on its revenue streams (e.g., own sources, intergovernmental transfers) and its sustainability over the period of borrowing. Computing net worth of a subnational entity may not be very useful keeping in view the nature of assets of the government and the assigned roles and responsibilities. However, there are instances where the property of a state government was attached due to default in invoking the guarantee issued.

The second concern is the nonavailability of an accrual based accounting system at the state

[6] "Subnational Government as Borrowers" in Mila Freire and John Peterson (ed.) Subnational Capital Markets in Developing Countries. (A co-publication of the World Bank and Oxford University Press).

level, which fails to provide a clear picture of the financial position of the state governments. While the Twelfth Finance Commission (TFC) through its recommendations has tried to reward the better performing states with debt write-offs. Debt write-off measures recommended by the TFC have been related to bringing down the revenue deficit to zero and fiscal deficit below 3 percent over a stipulated period.

It would be possible for state governments to defer committed expenditure and generate surplus on the revenue account to avail these write-offs. This has become possible due to the existence of a cash based accounting system. Documenting and bringing changes in accounting policies (e.g., accrual accounting) and disclosure norms by the various state governments to the public domain would enable most state government bond investors to be more informed.

**Fiscal capacity and financial acumen of subnational jurisdictions are fundamental considerations in determining which entities are candidates for borrowing. Although these are not always correlated with size, private creditors generally prefer larger jurisdictions because of their better sophistication, ability to draw on more resources, and ability to spread the fixed costs of debt transactions over larger volumes of borrowing.**

The third issue of concern is the lack of detailed information pertaining to guarantees issued by state governments to facilitate borrowings by the Special Purpose Vehicles (SPVs).

In spite of the GoI's initiative to bring off-budget borrowings in the ambit of the Constitutional provisions often there is no budgetary provision made for the guarantees issued by state governments. It is very difficult to capture such information in the absence of an accrual based accounting system. Having expressed the above concerns, it becomes very important to understand how far a true ratio analysis would be useful and relevant in the context of a subnational entity in India.

This issue would be touched upon in this Part and would be discussed in detail subsequently while discussing the credit rating of subnational entities. A strict sense corporate rating may not be very useful and relevant for a subsovereign entity. Under such circumstances, it is very important to understand the risks involved in subsovereign borrowings. It is equally important to know what makes a state government solvent and whether solvency does ensures credibility. Solvency may or may not necessarily imply creditworthy. A cash surplus subsovereign entity may or may not be a sustainable debt repayer. It would depend to a large extent on the nature of existing responsibilities of the entity and the nature of future commitments.

## Judging State Performance — Some Parameters

Some of the major parameters that could be considered for judging the performance of a subsovereign entity could be the ones that relate to measuring their economic structure. For example:

- Strength and weaknesses in terms of diversity and flexibility within the sectors;
- Fiscal performance particularly relating to their debt profile; and
- Operating performance and cash flow.

Moreover, equally important is the aspect of economic management. This refers to the efficiency and effectiveness of its managerial issues. This might include the performance of the state public sector undertakings, its plan performance, purpose and efficiency of its utilization of the ways and means advances, transparency and judiciousness in issuing guarantees for the borrowings by state PSUs, local bodies and cooperative societies.

While looking at the performance of the state in terms of diversity and flexibility within the economy, it is required to look into the following sets of indicators:[7]

- Net State Domestic Product — its composition and growth;
- Per Capita Net State Domestic Product and its growth;
- Per capita availability of power, roads, railways and other major physical infrastructure;
- Per capita availability of education and health facilities;
- Growth of the industrial sector, particularly, manufacturing;
- Per capita sanctions and disbursements by the Financial Institutions (FIs); and
- Mineral reserves and extent of utilization of these mineral reserves, locally and globally.

While looking into the economic performance of the state, it is equally desirable that the strong economy of the state is also reflected in the states revenue (particularly tax) generation capacity. Though theoretically explainable in the Indian context, it is worth noticing that there is hardly any correlation between the economic performance of a state and its revenue mobilization capacity. This issue will be taken up in detail in the later Parts.

The second and the most important of the set of indicators is the financial performance of state government. However, due to several reasons discussed earlier in this Part, it is very difficult to capture the true picture of the financial strengths and weaknesses of a state. It is essential to understand the following:

- Performance of the states revenue earning capacity — its sustainability as well as its expenditure commitments both in the revenue as well as capital account;
- The financing of the plan schemes and its dependence on the internal and extra budgetary resources for the financing of the plan schemes;
- Significant dependence on the borrowings by the state PSUs for plan financing with government guarantee is often not viewed as a positive sign. Such funding with internal resources of the PSUs should be considered a plus for the government;
- While it is important for the government to depend more on its own resources and less on the transfers from the higher levels of government, dependence on a single source of revenue with less flexibility is often seen as a negative aspect;

[7] Various rounds of detailed discussions were conducted with the executives of ICRA Limited to understand the nature of subsovereign rating in India and the parameters used for determination of the rating.

- Clearly defined sharing mechanism of funds between different levels of government and nondiscretionary transfers are considered to be a positive for the subsovereign entity;
- Deficit in the revenue account is often considered a negative aspect. More so, if it is funded out of borrowings over a long time period and continuous revenue deficits leading to accumulation of debt. The situation becomes further unfavorable in the event of deteriorating balance of current revenue;
- Fiscal deficit as such is not bad with marginal or no revenue deficit so far as it is incurred as a result of increased capital outlay subject to quality of investment;
- In other words, a higher share of revenue deficit in the fiscal deficit is seen as a major drawback for a subsovereign entity;
- A major concern of a subsovereign particularly in the Indian context is the amount of its total liability, particularly those incurred as a result of the guarantees issued for the borrowings of the state PSUs. Outstanding guarantees as a share of the total liabilities of the state government is an important component of the states measure of fiscal performance.[8]

While the financial performance of state governments is important, it is equally important to have a clear idea of economic management issues. These include state governments adherence to the provisions in the various statutes. It is very much desirable for the subsovereign entities to stick to the requirements and the provisions of the statutes like the Fiscal Responsibility Act, Ceiling of Government Guarantee Act, etc. Moreover, it is desirable on the part of the subsovereign to try and adhere to the benchmarks brought out by the Central Bank pertaining to the debt sustainability factors and guarantee related indicators.

The successive Finance Commissions have recommended setting up of sinking Funds for amortization of debt. The Twelfth Finance Commission (TFC) specifically recommended that all States should set up sinking funds for amortization of all loans including loans from banks, liabilities on account of NSSF, etc. The Fund should be maintained outside the consolidated fund of the States and the public account and should not be used for any other purpose, except for redemption of loans. Besides, the TFC also recommended that all States should set up guarantee redemption funds through earmarked guarantee fees. This should be preceded by risk weighting of guarantees. These would improve the credit rating of the States when they apply for loans.

While indicators and benchmarking are important, it is essential for the subsovereign to adhere to the recommendations and suggestions of the Central Bank in terms of maintenance of information and regularity in bringing out information required to develop investors confidence. Many of these issues will be taken up in subsequent Parts.

[8] Various credit rating agencies have indicated that while Guarantees (G)/(Debt (D) + Guarantee (G)) is a very important ration. The rating agencies analyze the total composition of Debts (D) and Guarantees (G). In addition, the agencies have stated that while Guarantees (G) are important they may not be a critical factor. Credit agencies look at many factors including cash flows, provisions, and reserves.

**Part 2:**

# Debt and Investment Management Cell (DIMC)

At present, many states do not have a well-defined structure documenting, tracking and assessing the implications of debt, contingent liabilities and investments. Debt data recording is fragmentary in nature. With regard to state borrowing from the centre, the Comptroller and Auditor General of India (CAG) maintain records for all state governments. For market borrowing, the Reserve Bank of India keeps the accounts and conducts the debt servicing. State governments which borrow from different sources do not have a satisfactory mechanism to compile the entire spectrum of borrowings and the outstanding debt, and monitor and use them for their borrowing strategy. Financing of fiscal deficits in the case of almost all States shows the total annual borrowings exceeded the fiscal deficit thereby inducing financial loss to the States.

Effective debt management practices suggest that debt management functions should be consolidated in one primary location and organized along functional lines.[9]

At the operational level of debt management, the responsibilities of the Debt and Investment Management Cell will include contraction of loans and their debt servicing, and recording, monitoring and analysis of the state level debt. These functions take two forms: passive and active. The recording and analytical functions are regarded as passive functions in that their performance does not imply a change in the state's debt profile. In contrast, the functions of raising and servicing state government borrowings are considered active functions in that they will affect the state's debt profile.

## The Funding Process

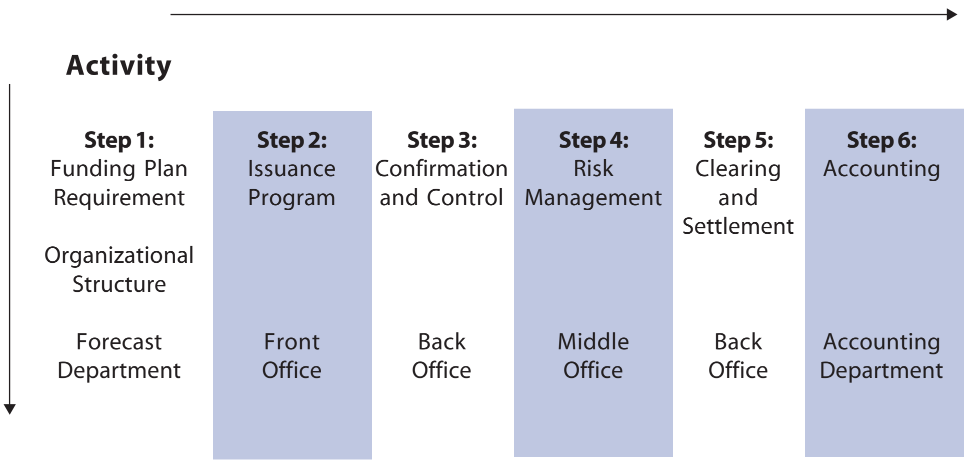
Figure 2.1 presents an overview of the debt management process and the functions that should be undertaken by the Debt and Investment Management Cell (DIMC).[10] The funding process (see Figure 2.1) indicates that:

- The DOF-Treasury develops a funding plan to determine how much needs to be borrowed;
- The debt issuance program is established by the *Funding and Resource Mobilization Branch (Front Office)*. Based on the estimated needs, the office develops a debt issuance program to meet the financing gap;
- The debt is issued and the transaction is recorded and accounted for as part of the *Debt Liability, Investment and Risk Analysis Branch (Middle Office)* operations. The Middle Office continuously analyzes the risk to the government's debt portfolio of certain debt related and other indicators (e.g., interest rate, exchange rate movements). This office would also evaluate the effectiveness of state government (equity) investments and risks

[9] DIMC should be established to primarily manage state government debt and guarantees. However, many Indian states should manage their entire portfolio of assets better. As a result, a DIMC can be established to manage the left hand side of the balance sheet (Investments) and the right hand side of the balance sheet (debt, guarantees). Providing enhanced transparency to state government balance sheets should translated into better credit ratings and, more importantly, lower costs of borrowing.

[10] A companion "State Government Debt Investment Management Cell (DIMC) Operations and Procedures Guide" to this "State's Going to Market and Creditworthiness Guide" is available upon request. The State Government DIMC Operations and Procedures Guidebook provides greater detail with respect to internal operations and procedures, data collection and recording, and management processes with respect to DIMC.

**Figure 2.1: The Funding Process**




with respect to state government guarantees; and

- The **Debt Recording, MIS and Settlements Branch (Back Office)** clears and settles issued debt as a component of its operations. This office would also record and keep track of guarantees and asset in the recording keeping of state government investment recording in states (where applicable).

The following sections will discuss the organization and structure of the debt management unit.

## Organizing the Debt and Investment Management Cell (DIMC)

The following section presents a brief overview of the organizational structure for the Debt and Investment Management Cell (DIMC). The DIMC will be administered under a unit head. The DIMC is expected to be a relatively small unit and will be structured to allow the employees to balance specialization in one specific area with acquiring an understanding of the entire debt management process.

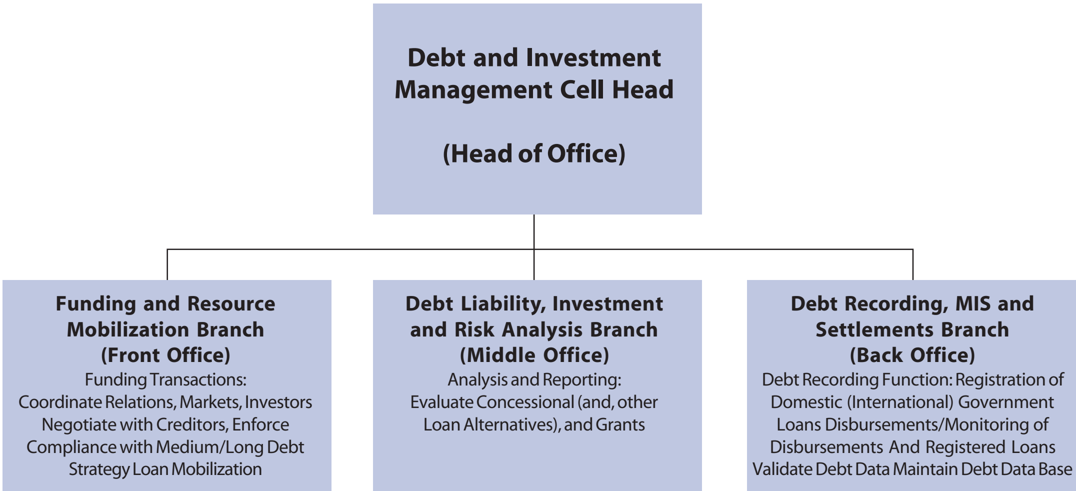
The Debt and Investment Management Cell may be housed within a Fiscal Policy Analysis Cell (FPAC) or outside the FPAC. The DIMC is expected to be a small unit with some members having overlapping skills and functions. A streamlined (multitasking) orientation for the employees of the Debt and Investment Management Cell will lead to greater operational efficiencies.[11]

One possible scenario for a Debt and Investment Management Cell structure is provided in Figure 2.2. The functional organization for public debt management that is increasingly emerging around the globe is similar to that of an investment institution.

While the agencies responsible for debt management may not be structured as in these institutions, several operational areas may be

[11] See Annexure 7: Minnesota State Debt Management Policy for more information regarding a U.S. State government's policies regarding the management of state government debt.

### Figure 2.2: Organization of a Debt and Investment Management Cell




established within a debt, guarantee and investment management unit that corresponds to three categories of the debt, guarantee and investment management function, including:

- **Funding and Resource Mobilization Branch (Front Office) –** This office will undertake borrowing operations based on an approved borrowing plan. This operational unit will also take the responsibility for guarantee (and hedging) transactions of the government;
- **Debt Liability, Investment and Risk Analysis Branch (Middle Office) –** This office will focus on developing a debt, risk and investment management strategy, develop borrowing and investment scenarios and compare the emerging debt indicators with agreed benchmarks over a period of time. This would enable sustainable levels of public sector borrowings to be estimated and a borrowing policy and plan for public sector borrowing to be prepared; and
- **Debt Data Recording, Management Information and Settlements Branch (Back Office) –** This office will be responsible for making (or integrating with the treasury) debt service payments based on creditor invoices that are crosschecked with its own database and also be responsible for monitoring loan utilization and the preparation of accounting and other reports required by creditors and the government.[12]

### The Front Office — Funding Transactions

The front office is typically responsible for all funding transactions, including loan negotiations and issuing government debt. In this process, front office staff seek the most efficient funding cost, taking into account the risk parameters established by senior management and State government policy. It is the responsibility of the

[12] Please see "State Government DIMC Operations and Procedures Guidebook." The State Government DIMC Operations and Procedures Guide provides greater detail with respect to internal operations and procedures, data collection and recording, and management processes with respect to DIMC.

front office to operate within a legal and regulatory and issuance framework. Furthermore, the front office should maintain well-informed and coordinated relations between the state government, RBI, the markets, investors, credit rating agencies, and international creditors.

The front office should:

- Be able to evaluate funding alternatives and their impact on the debt portfolio in terms of compliance;
- Be able to negotiate with all external creditors and issue the desired amount and type of borrowing or hedging instruments;

**Forecasting and managing a state's cash requirements are a prominent aspect of the DIMC. This will ensure that the state manages cash inflows/outflows more efficiently. A major requirement of the debt unit is to ensure that current and future funding needs, arising from refinancing maturing debt as well as new government funding, can always be met. Ultimately, the protection of liquidity is one of the most basic tasks of the Head of the DIMC.**

- The Front Office will be responsible for nonSLR borrowing: going to market, pricing and tenor of the instrument, and, meeting with investors where appropriate; and
- Be in compliance to the parameters of the medium and long-term debt management strategy as recommended by the middle operations office and approved by policy makers.

### Middle Office Operations — The Analytical Function

The analytical function provides elements for analysis and decision making, utilizing the information provided by the recording and control unit (back office). At the aggregate level, it involves macroeconomic analysis to explore the various options available given economic and market conditions and the future structure of the state government's debt (and, investments). The function is necessary in order to continuously review the impact of various debt management options on the state's budget and to help with assessing such issues as the appropriate terms for new borrowing.

At the disaggregated level, the analytical function would look at things such as the various borrowing instruments available, or the choice of maturities. It could also assist in the analysis of new financial techniques such as hedging, swaps, and risk management techniques. If the state has debt benchmarks to comply with, this function will also measure the performance of the State in relation to those benchmarks. All of these operations combined are called middle office operations.

In brief the middle office operations should:

- Develop a strategy for debt funding;
- Develop a debt profile review; and
- Should evaluate concessional loans in terms of their contribution to debt sustainability ratios.

### Back Office Operations — The Recording Function

The recording function records information. Good debt (and, investment) management requires accurate and up to date information. Prompt updating of debt (and, investment) data files requires a well-organized and efficient system of information flow to the office in charge of the debt registering function. This information flow is necessary at all levels, including new loans, transactions, disbursements and arrears created. This function is part of what is referred to as back office activities. The primary responsibility of the back office includes:

- Registration of state government loans, guaranteed parastatal and local government loans and contingent liabilities;
- Monitoring disbursements of the registered loans for purposes of updating the database;
- Providing timely projects to ensure prompt and timely debt servicing;
- Maintaining a debt database; and
- Validating debt data.

Forecasting and managing a state's cash requirements are a prominent aspect of the DIMC. This will ensure that the state manages cash inflows/outflows more efficiently. A major requirement of the debt unit is to ensure that current and future funding needs, arising from refinancing maturing debt as well as new government funding can always be met. Ultimately, the protection of liquidity is one of the most basic tasks of the Head of the DIMC.

A key debt recording function, which can be assigned to the DIMC, is the collection, updating, monitoring and reporting on the state debt portfolio. In this connection, use of debt management software is essential. A widelyused software in the British Commonwealth countries is the *Commonwealth Secretariat Debt Recording and Management System (CS-DRMS)* software. This software is available on a gratis basis for all Commonwealth member states. Training is provided by the Commonwealth CS-DRMS team in-country. To date, the Reserve Bank of India (RBI), the Ministry of Finance Department of Economic Affairs (DEA) and the states of Assam, Jharkhand, Karnataka and Uttarakhand are using the software for daily debt management and recording.

## Path Toward Effective Debt Management

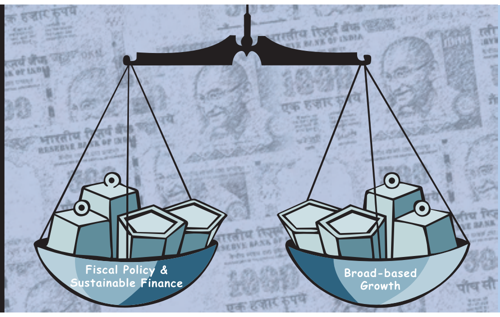
Poorly performing manual debt recording systems, analysis, and debt management strategies are often a symptom of broader organizational problems, such as inadequately defined goals and functions and unclear decision making authorities and accountabilities.

In many countries, government debt management skills are often weak because of disagreement over roles, decision making powers, inadequate systems of checks and balances, and difficulties in establishing accountability for quality assurance in such environments. These problems may be compounded by a shortage of well-trained staff.

There is little reason in considering systems enhancements such as the introduction of a computerized debt recording system until the data quality and organizational issues are resolved. An important initial step is to undertake an audit of the quality of the loan data and to verify why data are unavailable or of poor quality. This requires an examination of the business procedures involved in raising and disbursing loans, including but not limited to arrangements for borrowing requests, disbursing funds to end users, on-lending, and making debt servicing payments and principal repayments. Procedures for requesting and approving guarantees (contingent liabilities) should also be reviewed.

In developing an effective debt management strategy it is essential to verify the loan accounting data and to retrieve missing information on cash flow obligations. This process itself can take several months. A repository for all loan documentation and records relating to borrowing, disbursement, on-lending, and guarantees should be centralized within the DIMC in the Department of Finance.

In closing, please see Annexure 8 for a recommended road map for establishing a DIMC and implementing the CS-DRMS software.




Section III

# The Importance of Credit Ratings

## Part 1:
# Credit Analysis and Credit Rating

Credit risk is the risk arising due to uncertainty in a borrower's ability to meet its obligations. Because there are many types of counterparties from individuals to sovereign and subsovereign governments and several different types of obligations from personal loans to derivative transactions, credit risk takes many forms.

### How is Credit Risk Measured?

The primary source of market-based information on credit risk has been the corporate bond market. The margin between the yield on corporate bonds and that on government bonds has typically been used to measure credit risk. These margins tend to vary with the credit rating of the borrower and the term to maturity of the bond. The lower the credit rating and the longer the term to maturity, the higher the credit spread tends to be, since both the characteristics increase the possibility of default. Recently, Credit Default Swap (CDS) is being used for measuring credit risk.[13]

This situation may not be very strictly applicable in Indian context where there are various restrictions operational in the functioning of the bond market and interest spreads may not capture the risks involved in a strict sense. In assessing credit risk from a single counterparty's perspective, an institution normally considers three issues. These are:

- Default probability. Default probability is the likelihood that the counterparty will default on its obligation either during the life of the obligation or over some specified horizon, such as a year. Default probability computed for a one-year horizon is termed as expected default frequency;
- Credit exposure and recovery rate. In the event of a default, credit exposure is the measure of the extent of outstanding obligation when the default occurs. Recovery rate is the fraction of exposure that may be recovered through bankruptcy proceedings or through some other form of settlement; and
- Credit quality of an obligation refers generally to the counterparty's ability to perform on the obligation. Credit quality encompasses both default probability and recovery rate. Credit quality of an individual or small business is typically assessed through a process of credit scoring. Credit scoring for individuals for (say issuance of a credit card or personal loan) may have a standardized structure. This structure incorporates information pertaining to the individuals annual income, existing debt, etc. and produce a number called the credit score.[14]

Things become more complicated when we deal with larger institutional counterparties or sovereign/subsovereign governments due to the varied and complicated forms of credit risks. Under such circumstances, credit analysis becomes more important rather than just credit scoring.

The term credit analysis is used to describe any process for assessing the credit quality of a counter party. While the term can encompass credit scoring, it is more commonly used to refer to processes that entail human judgment.

[13] CDS is a bilateral contract between two FIs, in which one agrees to compensate the other in the event that a nominated third party experiences an event (say, bankruptcy) (See "New Measures of Credit Risk": Reserve Bank of Australia Bulletin, 2003).
[14] http://www.riskglossary.com/articles/credit_risk.htm

People providing these judgments based on information provided by the issuer are known as credit analysts. Credit analysts "judgments are based on review of information of the issuer in the balance sheet and income statement (known as financial analysis), the performance of the issuer in comparison to the industry/sector in the current economic environment (known as industry analysis) and the managerial strength and weaknesses (known as management analysis). Based upon this analysis, the credit analysts assign the counterparty (or the specific obligation) a credit rating, which can be used to make credit decisions."

**The primary source of market-based information on credit risk has been the corporate bond market. The margin between the yield on corporate bonds and that on government bonds has typically been used to measure credit risk. These margins tend to vary with the credit rating of the borrower and the term to maturity of the bond. The lower the credit rating and the longer the term to maturity, the higher the credit spread tends to be, since both the characteristics increase the possibility of default. Recently, Credit Default Swap (CDS) is being used for measuring credit risk.**

## Subsovereign (State) Ratings

Subsovereign rating in India has remained limited to the municipal bodies. Unlike the United States, municipal bodies and state governments in India should not be treated at par as subsovereign entities. While states are subnational entities, municipal bodies are substate entities. According to the Constitution of India (Entry 5 of List II, i.e., Art.246) local governance is a state subject and the Federal Government's treatment of the state governments is not similar to the Federal Government's treatment of the municipal bodies.[15]

### The Twelfth Finance Commission and State Borrowing (TFC)

A state government rating was not something which was considered very important in the current Indian fiscal federalist structure till the report of the central Twelfth Central Finance Commission (TFC) came out in November 2004. The TFC is said to have redefined the existing federal-state fiscal relation. Keeping in view the global trend, the TFC recommended discontinuity of the federal government's loan intermediation role hitherto existing and subjecting states to market discipline. The market borrowing by the states had remained confined only through the Reserve Bank of India (RBI) as discussed earlier. The TFC recommended that the federal government should not act as an intermediary and the states should be allowed to approach the market directly.[16]

This has necessitated state governments to be more fiscally disciplined and manage their finances prudently. Some of state governments have informally approached the credit rating agencies for rating. However, these ratings have not been finally publicized for the purpose of mobilizing resources for the market.

### Subsovereign Borrowing

Borrowing by subnational governments is a powerful tool of financing, but possess potential problems when used, where subnational governments are not subject to hard budget

[15] Constitution of India.

[16] Twelfth Finance Commission Report (2005-10), Ministry of Finance, Government of India.

constraints, capital market fails to impose hard credit discipline and officials are not fully accountable to their constituencies. A preliminary survey of the financial condition of subnational governments show that few have the degree of creditworthiness needed to access domestic capital market. The frequent failure of international on-lending initiatives to build sustainable local credit markets stems in part from lack of clarity as to what elements should a subnational credit market should possess.

A subsovereign's ability to issue debt successfully is subject to a series of limitations posed both by the markets and by higher levels of government. Other limitations and restrictions are also reflected in the broader systems and legal frameworks under which subsovereigns operate. Some determinants of subsovereign borrowing like mode of financing and capital improvement plan, etc., are within the jurisdiction of the subsovereign entity. However, the subsovereign entity must also accommodate a series of externally imposed limitations by the higher levels of government. For example, Art. 293 (3), as discussed earlier of the Constitution of India limits the borrowing by the state governments as follows:

Art.293 (3): "A state may not without the consent of the GoI raise any loan if there is still outstanding any part of a loan which has been made to the State by the GoI………"[17]

Moreover, state governments access to market borrowings in India has been limited by the Government of India through compulsory exhaustion of quota of borrowings from the National Small Saving Fund (NSSF) even after the recommendation of the TFC.[18]

## Subnational Borrowing: Debt Management Plan

Capital market borrowing represents just one of a number of approaches to financing major government expenditures. If a subnational government decides to borrow, it is important that it develops a Debt Management Plan/ Program and carefully evaluate the financial risks associated with debt obligations prior to entering the capital market. In other words, mobilizing resources through issuance of debt should not be a stand-alone decision of the subsovereign rather it should form a part of the overall capital investment and debt management plan.

A correct debt management policy can provide the conceptual framework and necessary tools to guide the borrowing policies by subsovereign entities. A debt policy is a necessary tool for considering how each issuance of debt relates both to previous and future issuances and also to longer-range strategic development and budgetary goals. One of the key reasons for a separate capital budget is that decisions to engage in government borrowing should not be made in a vacuum. In deciding whether to enter the bond market (or borrow from a bank) a subsovereign must consider not just the best way to fund a particular project but also how this financing mechanism fits the overall budgetary goal of the subsovereign. Under most circumstances, borrowing by the subnational governments will entail subnational financial risk as the capital markets for subnational debt are

[17] Constitution of India.
[18] "Inter-ministerial Group to look into Debt Cap for States" (Business Standard; 17th June, 2005) and "No Market Access for States till they have Access to NSSF Money" (Business Standard; 15th June 2005).

very underdeveloped and volatile. The debt management policy as a part of the overall budgetary policy of the subsovereign should elaborate on the advantages and disadvantages of entering the market vis-à-vis other loans and its short and long-term impact for financing a particular project.[19]

### The Subsovereign Rating Process[20]

If a subnational (state) government issues debt and determines that it needs a credit rating, the issuer will hire a rating agency. The rating agency begins the process by asking for a presentation from the issuer. The issuer takes this opportunity to describe the issue and make a case for its good rating. Generally, a rating process involves the following:

- Background and history of the issuer;
- Official statement of the issuer;
- Proposed terms, legal covenants and bond indentures for the issue;
- Indentures for the existing bond issues, if any;
- Five years of audited financial statements and annual reports and operating; capital budgets; and
- Information about projects in case it is issued for a specific project, such as construction and operating contracts, concession agreements and other project and legal documents.

Each rating agency's procedures are unique. Moreover, the information provided differs based on the particular type of bond being issued. With the completion of the analysis based on information provided, the Internal Rating Committee of the Rating Agency will debate the credit quality and determine the rating.

The rating is published only if the issuer agrees with the assigned rating, otherwise, it remains confidential. However, the rating agencies policies regarding confidentiality differ. Under certain circumstances, the rating agency publishes the rating even against the wishes of the issuer to protect investor interests. The issuer-rating agency relationship will continue till the maturity of the issue. The rating agency reserves the right to upgrade or downgrade the rating based on new credit developments. The proper antidote to any temptation to shortcut the objectivity of credit ratings is to require public disclosure of the financial and other data that should serve as a basis for rating, as well as public disclosure of the full rating report.

## Subsovereign Rating Factors[21]

Factors determining rating of an entity issuing an instrument or simply an instrument is guided by the type of instrument issued. An instrument's repayment liability may be from the general revenue sources of the issuer, known as a general obligation bond. Key aspects of general obligation bonds include:[22]

- These are secured by the full faith and credit of issuing governments;
- Relies on taxing ability of the issuing government and the intergovernmental revenue transfers;

[19] See "Credit Rating and Bond Issuance at the Subnational Level" The World Bank, 1999; pp 2-30.
[20] Ibid, pp 2-30.
[21] Discussions with ICRA Officials and World Bank Handbook on Subnational Borrowing.
[22] Revenue bond debt is serviced through specific project revenues.

- Typically issued for financing nonrevenue generating projects;
- No trustees or debt service reserve funds required; and
- Investor concerned with the underlying fiscal stability of the issuer, good financial management procedures and potential likelihood of fiscal reforms.

However, revenue bond debt is financed through specific project revenues. A debt service reserve fund is often a credit enhancement requirement with respect to revenue bonds. A project feasibility study is an essential upfront requirement before a revenue bond can be considered. Strict sense project revenue bonds are very rare in India. For example, many local urban body infrastructure revenue bonds use not only the dedicated revenue stream of the specified project, but must also include general budgetary funds to finance the debt service.

In rating general obligation bond, the rating agencies generally analyze the following five key factors:

- Economic base, diversity and growth;
- Analysis of outstanding debt;
- Financial operations — revenue and expenditure flexibility;
- Governments administrative structure, legal factors and political dynamics; and
- Sovereign ceiling.

The above-mentioned factors are explained in the following sections.

**In India, the rampant issue of guarantee by the state governments for opting off-budget borrowings needs reviewing. This could weaken the issuer's ability to secure future obligations. States have, however, started coming up with a statutory ceiling on these guarantee issued.**

## Economic Base, Diversity and Growth

Logically, an economy's high growth is expected to be reflected in its high tax revenue generating capacity. Economic prosperity and demographics are significant credit considerations. However, in India and in many developing economies, a strict sense correspondence does not exist between growth of the economy and tax revenue generation. There are states that have high growth rate of GSDP with low tax to GSDP ratio and vice versa.

Diversity with no dominant economic sector and a healthy blend of manufacturing, agriculture and services is a positive feature reducing the risk of default as a result of lower revenue from the predominant sector. High growth of the economy as a result of a sector largely exempt from taxation as in case of India (e.g., agriculture) does not necessarily is a positive feature. Nevertheless, a blend of employment in public and private sector is a positive aspect.

As mentioned earlier, though there is no 1:1 correlation between the economy and the finances of the state governments, some of the following indicators are generally considered by the rating agencies:

- Real growth of GSDP;
- Real growth of per capita GSDP; and

- Relative shares of various sectors in GSDP.[23]

It is, however, felt that it would be more appropriate to consider the growth in revenue from taxes on commodities that contribute significantly to the GSDP. In other words, the sector that contributes significantly to the GSDP is also a major contributor to the tax revenue of the state. Computing growth of this sector would be more meaningful, rather than the overall performance of the economy.

**In Indian context, it is imperative to understand the fiscal federalist structure including the nature and mechanism of intergovernmental transfers. In addition to sovereign support in the form of explicit guarantee to subsovereign entities, credit rating agencies also consider the scope of federal government oversight of the activities of subnational governments.**

### Analysis of Outstanding Debt

Legal structure, debt profile and burden of contingent liability are the three most important factors analyzed under this head. The objective of debt analysis is to understand the nature of debt owed (tenure, volume, etc.) and the purpose for which it has been borrowed and what has been pledged to repay the debt.

- *Debt is often measured relative to the level of wealth* as well as to the operating revenues. Some of these indicators have been taken up in detail while discussing benchmarking in subsequent sections. Debt analysis also includes factors such as off-balance sheet project financing, lease obligations, debt guarantees and contingent liabilities in enterprise funds or other state-owned entities.
- *Exposure to the risk of exchange rate depreciation for foreign currency debt* is also a major issue to be considered while analyzing debt profile. This has become an important criterion in subsovereign rating only after the TFC recommendation. The TFC recommended that the risk of all external agency loan, though intermediated through the federal government would lie with the subsovereign.
- *Contingent liability* is an important factor in analyzing debt situation of a subsovereign.

In India, the rampant issue of guarantee by the state governments for opting off-budget borrowings needs reviewing. This could weaken the issuer's ability to secure future obligations. States have however, started coming up with a statutory ceiling on these guarantee issued.

The following indicators are considered in debt analysis by rating agencies, including:

- Debt/Consolidated Debt (including contingent liabilities) to GSDP Ratio;
- Debt/consolidated Debt (including contingent liabilities) to Total Revenue Receipts (TRR) Ratio;
- Interest Payments to TRR Ratio;

[23] Credit rating agencies Tax/GSDP analysis emanates from a basic understanding that most state taxes are consumption taxes and hence sectoral gross value added in the economy. As a result, these taxes cannot be segregated for analysis. For example, sales tax/manufacturing sector GSDP may not be analytically useful because sales tax is paid on consumption (by all income earners in the state, not just those from the manufacturing sector). Credit rating agencies such as ICRA use SOTR/GSDP rations under the premise that GSDP is a reflection of the total consumption in the state (innately assuming common savings rates across states).

- Debt Growth/Consolidated Debt Growth to Revenue Growth Ratio;
- Outstanding Guarantees to GSDP/Revenue Receipts Ratio;
- Revenue Deficit to Fiscal Deficit Ratio; and
- Fiscal Deficit to Total Revenue Receipts Ratio.

### Financial Operations

Financial analysis begins with an examination of the issuer's financial statements. The agencies financial analysis includes review of the budget process, revenue and expenditure structure and past financial operations. While there is no universal accounting standard that is practiced in every country, rating agencies will expect the issuer to explain the accounting practices used.[24]

Factors that the rating agencies normally consider include:

- Annual operating surpluses or deficit;
- Expectation of the future revenue and expenditure;
- Inspection of tax revenue and user fee revenue trends including their administrative mechanism;
- Issuer's budget and capital plan; and
- Flexibility of the subsovereign to raise additional revenue or cut expenditure, if required.

Keeping in view the current disclosure norms and existing information maintenance system at the state level in India, some of the important indicators (ratios) could be:

- Own Revenue to Total Revenue;
- Share of the Major Tax to Total Own Revenue;
- Nondevelopmental Expenditure to Total Expenditure;
- Capital Expenditure to Total Expenditure;
- Capital Outlay to Fiscal Deficit;
- Market Borrowing for Financing Fiscal Deficit;
- Budgetary Resources for Plan Funding;
- Tax to GSDP;
- Own Nontax Revenue to Total Own Revenue; and
- Fiscal Transfers to Total Revenue.

### Administrative Structure, Legal Factors and Political Dynamics

One of the most important rating factors for subsovereign rating is the regulatory and legal structures of the country's executive and legislative branches of the government, the services provided by the federal government, state enterprises and administrative agencies and the relationship among the federal and the subsovereign governments to help determine the issuer's willingness to pay. In addition, the rating agencies also need to consider the intergovernmental systems and political and administrative supportiveness.

In Indian context, it is imperative to understand the fiscal federalist structure including the nature and mechanism of intergovernmental transfers. In addition to sovereign support in the form of explicit guarantee to subsovereign entities, credit rating agencies also consider the scope of federal government oversight of the activities of subnational governments.

[24] Generally Accepted Accounting Practices (GAAP) and International Accounting Standards (IAS) are the two primary accounting standards used in many countries.

Analysis of legal and regulatory limitations is also an important credit factor. This includes consideration of:

- Details of statutory and constitutional limitations regarding subnational borrowing laws;
- Constitutional limitation on taxing authority;
- Bankruptcy and insolvency laws, if any; and
- Summary of pending or proposed legislation that affects the debt issuance and revenue sources of pledged security of debt.

### Sovereign Ceiling[25]

This represents the upper limit of the rating for a particular instrument that a subsovereign entity in a given country can have. Even if a financially stable subnational borrower has the resources to pay its foreign currency debt, under the sovereign ceiling of access to foreign exchange and sovereign control over monetary policy, it could not do so.

In Indian context, it would apply to both foreign currency debt as well as local currency debt of the state government as the Constitution of India puts limit to state government borrowings. Though it is theoretically possible but is not likely that a subnational issuer to have a domestic currency debt rated higher than that of the sovereign. Higher subsovereign ratings represent conservative financial management, solid currency reserves and modest future borrowing requirements.[26]

## General Creditworthiness Standard

Creditworthiness is a slippery concept that cannot be measured objectively. It is often used as general statement of an entity's financial health that is not tied to a specific transaction.

An issuer might not be "creditworthy" in general, but a specific bond structure may make a transaction creditworthy. It is very difficult to set standard benchmarks for indicators like debt-GDP ratio, interest payments to revenue receipts ratio or outstanding liability to revenue receipts ratio etc. where one can with certainty conclude whether or not an entity is creditworthy.

Generally, an entity (sovereign or subsovereign) is considered to be creditworthy if it has the ability to service debt in time. For a sovereign or subsovereign entity, the determination of creditworthiness largely depends on:

- The existing debt burden;
- Projected deficits both in payments and budgets;
- Future financing arrangements;
- Buildup of the repayment capacity relative to domestic product; and
- Existing repayment liability relative to its resources.

[25] While recommending that the reforms are to be undertaken at the initiatives of the State Governments, the TFC emphasized the need for imposing hard budget constraints and suggested that the overall borrowing program of a State should be within a prescribed limit, determined annually, taking into account borrowing from all sources. In this context there is a need to ensure that the ceiling of the Annual borrowing prescribed for each State is: (a) consistent with the fiscal deficit target for all States taken together in view of the restructuring program that has been drawn up taking into account the macro considerations; and (b) that such ceiling are consistent With sustainability requirements of each State. The TFC also suggested a methodology by which the aggregate fiscal deficit target is translated into permissible level of fiscal deficit for individual States.

[26] Credit rating agencies such as ICRA have pointed out that given the current Indian intergovernmental transfer structure and the essence of Article 293(3), that it is impossible for states to breach the sovereign rating in the Indian context.

As of May 2006, no state government in India has yet been rated. Nevertheless, the ratings of some of the agencies like the SPVs created for the irrigation purposes in Karnataka (KBJNL and KNN) which do not have any resource flow are implicitly the ratings of the Government of Karnataka.

Norms for debt sustainability of the subsovereign entities (the state governments) are:

- Debt to GSDP Ratio — 30 percent;
- Debt to Total Revenue Receipts (TRR) Ratio — 300 percent for nonspecial category states and 200 percent for special category states;
- Interest Payments to TRR Ratio— 18 percent 20;
- Debt Growth to Revenue Growth Ratio — 1.25;
- Revenue Deficit to Fiscal Deficit Ratio — 50 percent; and
- Fiscal Deficit to Total Revenue Receipt Ratio — 25 percent.

These criteria could be utilized for the purposes of analysis of "creditworthiness" of state governments and could be useful benchmarks for credit rating purposes.[27]

Credit rating[28] is an independent opinion on the future ability, legal obligation and moral commitment of a borrower to meet its financial obligation of interest and principal in full, in a timely manner. The rating assesses the probability that the borrower will default on the security (or a group of securities) before the maturity date. While credit ratings are important, these are not:

- Recommendations to buy, sell or hold security;
- Opinion about general quality of an agency (individual, corporate, sovereign or subsovereign government);
- Statement about the quality of life in a community; and
- Opinion about correctness of a government's policy decisions.

Credit ratings are important from both the investors and issuers perspectives. They also affect the costs to both sides of buying and selling debt. This occurs because credit ratings indicate a level of default risk, which is central ingredient for pricing bonds. High credit rating implies low default risks leading to low cost of borrowing and vice versa.

The cost of borrowing is reflected in the spread, which determines the bond's interest cost. Ratings are intended to equip investors with a consistent measure of creditworthiness, which provides reliable comparisons of debt and debt like instruments in capital market. Ratings can:

- Expand the number of investors available to purchase the security;
- Make debt more attractive to wide range of investors; and
- Provide a form of free liquidity about a subsovereign's financial performance.

[27] Credit rating agencies have commented that although they consider the Planning Commission norms to be effective financial benchmarks, agencies such as ICRA have benchmarks that are aligned with their own rating scale.
[28] Bond Rating Process: A Progress Report by Christopher Mahoney, Senior Managing Director and Chairman, Credit Policy Committee, Moody's Investors Services, 2002.

**Part 2:**

# Role of Credit Rating Agencies[29]

Credit rating agencies have a major role to play towards successful operation of the capital market of a nation. The main and proper role of credit rating agencies is to enhance transparency and efficiency in debt capital markets by providing an independent opinion of relative credit risk, thus reducing the information asymmetry between the borrowers and lenders.

In some circumstances, credit ratings are performed not just by credit rating agencies but also by national governments or quasi-government agencies that is prescreening subnational issuers so as to give the market greater faith in their repayment ability. Under such circumstances, the national government needs to consider whether the market will see its rating or precertification as an implicit national guarantee of the subsovereign debt issue.

Regulation, however, should not be attempted to hinder the very objective of the rating process (i.e., to enhance market efficiency, enhance transparency and protect investors' interests). Regulations that are used toward controlling the independence and objectivity of the rating agencies raise concerns. This issue is very important particularly when talking about the rating of a subsovereign entity. Moreover, regulation should not prescribe conditions for liability that are inconsistent with the nature of ratings.

As a part of the rating process, the fee of the rating agency comes from the issuer rather than the investors. However, in economies with developed capital markets as in the US, there are Investor Associations who appoint rating agencies to rate issues of some of the issuers where the members of this association wishes to invest in. In this case, the rating agency would be more inclined towards protecting the investors interests. Ideally, credit rating agencies should have their interests aligned with that of the investors and not with the issuing companies. Further, it is advisable to have competing agencies rather than making it a much regulated business.

Secondly, rating agencies in developing economies generally do not bring out regular publication of company data. In India, the balance sheet libraries are still governed bylaws and procedures that lay more emphasis on confidentiality than on meeting the information needs of the investors. In the US, for example, Moody's or Standard and Poor bring out company data regularly. Thus, the net result is some degree of opacity, which is not conducive for investor confidence.

Rating agencies routinely request nonpublic data in the course of their surveillance activities. Unlike accounting firms, rating agencies have no authority to demand financial data. Indeed, issuers are under no obligation to provide the requested data. The rating agencies should:

- Publish all information of the issuers used for the purpose of rating;
- Highlight in greater detail aggressive or potentially misleading accounting practices; and

[29] The Role and Function of Rating Agencies: Evolving Perspectives and the Implications for Regulatory Oversight; Speech by Raymond McDaniel, President, Moody's Investors' Services (2005).

- Highlight areas in which greater disclosure is desirable.[30]

## Ratio Analysis and its Relevance in State Creditworthiness Analysis

Ratio analysis is a major component of credit risk analysis. Several ratios are generally taken into account to have a better understanding of the creditworthiness of the issuer. However, the feasibility and relevance of ratio analysis is questioned in current Indian subsovereign context, particularly due to the existence of a cash-based accounting system and not an accrual one. The cash-based accounting system fails to capture the appropriate profile of the subsovereign.

**While subnational borrowing itself is in a nascent stage in India, many of these mechanisms would need some time to be put in place. The minimum experience of subnational borrowing (it could be actually termed as substate borrowing) in India was by some of the municipal corporations. Most of these issues were private placements and for these the Securities and Exchange Board of India (SEBI) regulations of financial disclosure and rating were not mandatory. Moreover, most of these issues were structured obligations (SO) whereby the repayment mechanism was secured through opening an escrow account. These escrow accounts were being managed by trustees (usually banks) and issuer lost control over the revenue sources escrowed till the maturity of the issue.**

Cash accounting records receipts when cash is banked and payments when cash is paid. Accrual accounting recognizes events and transactions when they occur, regardless of when cash changes hands. Only a cash flow statement, not a balance sheet, is prepared under cash accounting. As a result, with cash accounting it is very difficult to capture the information pertaining to the total liabilities accrued but not paid. Hence, the true picture of even the surplus/deficit is very difficult to determine. Under such circumstances, ratio analysis alone does not provide a clear picture of the financial situation of the entity.

The report of the "Group on Model Fiscal Responsibility Legislation at the State Level"[31] ("The Group") in India in addition to providing for the basic requirements for enacting a fiscal responsibility legislation at the state level also provided for certain disclosure norms for the state governments. The Group also recommended maintenance of the information on physical as well as financial assets of the state governments in India.

If not an accrual accounting system for the state governments, the disclosure norms required state governments to maintain information pertaining to details of assets (physical and financial). Moreover, outstanding guarantees which form a significant proportion of the liabilities of state governments were hitherto not captured as a part of the budget of state governments. The Group insisted upon maintenance of information pertaining to other liabilities in the form of payments due but not made. It is very difficult to appropriately account

[30] The Indian credit rating agency ICRA has commented that: i) issuers pay rating agency's fees; ii) ICRA's rating processes are credible and in line with best practices and ICRA's ratings are objective opinions; iii) ICRA regularly publishes information on its ratings and rated instruments and in addition, ICRA's analysts are available for discussion; and iv) ICRA publishes rationales for all its rating decisions and is always open to discuss its views and opinions with all market participants.

[31] Report of the Group on Model Fiscal Responsibility Legislation at the State Level, RBI, March 2005.

for this information provided the state governments do not bring out the details by itself.

## Availability of Credit Enhancements

Credit enhancement is a kind of credit support available in addition to credit substitution, which helps develop innovative kind of financing techniques. In credit substitution, the substituting entity's credit quality is considered and not that of the issuing entity. Full credit substitution isolates investors completely from the risks that may be associated with the true borrower or issuer. The credit substitute provides protection to the bond holders, even in the event of issuer default or bankruptcy. Credit substitution takes many forms of which bond insurance and letters of credit are the most common among them.

Credit enhancements are devices and programs that are meant to mitigate risks in debt transactions that creditors cannot or are not willing to take. Credit enhancement encompasses a variety of provisions that may be used to reduce the credit risk of an obligation.

There are numerous risks involved generally in lending money. In developing countries, the major risks will tend to be those associated with fundamental credit (default) risk and inflation and interest rate risk. While the first one is aggravated due to lack of borrower financial information, the second one arises due to thin long-term debt market and thin secondary debt market, i.e., lack of liquidity for investments. Lack of political stability also contributes to risks in the debt market.

The issuer's own credit quality, however, remains an important rating criterion in credit enhancement. Credit enhancements do not substitute for the issuer's own credit quality, but can improve a bond's rating criteria. Some of the commonly used credit enhancement mechanisms in Indian context include: (over) collateralization, structured obligation and third party loan guarantees.

Guarantees from the higher levels of government should normally be the last resort as a credit enhancement mechanism. However, state government support for Special Purpose Vehicles (SPVs) is very common in India. Nevertheless, some state governments have become conservative in issuing guarantees for the borrowings of the SPVs and the lower tier governments because states they need to maintain their own credit viability. State governments in many states have resorted to establishing a cap (ceiling) on the amount of outstanding guarantees.

Collateral is assets provided to secure an obligation. Traditionally, banks might require corporate borrowers to commit company assets as security for loans. Today, this lending is called secured lending or asset-based lending. Collateral can take the form of inventory, equipment, receivables, etc. Structured obligation refers to pledging of certain revenue sources in an escrow account to secure the repayment. Guarantees are often given by the higher levels of governments towards borrowings of the lower levels of the government to finance their capital expenditures.[32]

[32] http://www.riskglossary.com/articles/collateral.htm

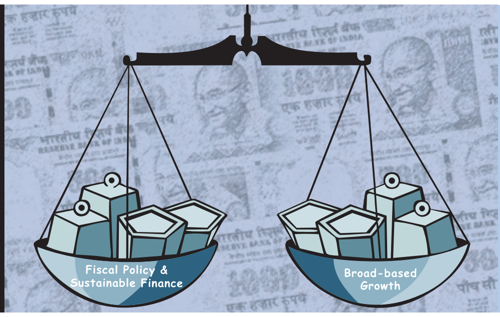
Internationally, irrevocable revolving credit arrangements (IRC) and guaranteed investment contracts (GICs) are the major credit enhancement mechanisms in addition to refunding bonds, tax exempt commercial papers and variable rate demand obligation.

Moreover, partial risk guarantees as well as private bond insurance are also significantly used internationally as credit enhancement mechanisms for subnational borrowings. These concepts have been discussed in detail in the earlier Parts. Many of these mechanisms would however, need a well developed capital market to be in place with a strong legal and regulatory environment providing support for a secondary market.[33]

While subnational borrowing itself is in a nascent stage in India, many of these mechanisms would need some time to be put in place. The minimum experience of subnational borrowing (it could be actually termed as substate borrowing) in India was by some of the municipal corporations. Most of these issues were private placements and for these the Securities and Exchange Board of India (SEBI) regulations of financial disclosure and rating were not mandatory. Moreover, most of these issues were structured obligations (SO) whereby the repayment mechanism was secured through opening an escrow account. These escrow accounts were being managed by trustees (usually banks) and issuer lost control over the revenue sources escrowed till the maturity of the issue.

Analysis by Bagchi (2001) and Bagchi and Kundu (2003) have provided some details of the escrow account for municipal borrowing and constraints in accessing market funds by subnational entities in India. However, it would be necessary to go into a detailed analysis of what forms of credit enhancement mechanism would be appropriate for the state governments in India in view of the current fiscal federalist structure.

[33] The opinion that credit guarantees should be the last resort for credit enhancement should be expanded. The authors believe that credit guarantees are a vital part of the lending process. However, the authors believe that there are a number of private market alternatives that should be explored first, before seeking state government guarantees.




Section IV

# Mechanisms to Enter Non Statutory Liquidity Ratio (SLR) Bond Market

**Part 1:**

# Structure of Debt Instruments

An issuer faces numerous structural questions involving the type of security to be used, the maturity structure, issue size, call provisions, and for limited obligation securities, the design of the trust indenture. In addition to these issues, there are questions on the method of sale, the basis of aware, and the timing of sales. All of these issues are considered in the section below. Typically, most state issuers will require outside assistance in making these decisions, since they are affected by both legal and market considerations that need expert technical consideration.

The structure of the security must be devised in such a way as to permit prompt repayment of the obligation while abiding with legal requirements and adhering to the adopted debt policy. In addition to conforming to the state government's own policies, the debt obligation may be structured so as to take advantage of the bond market's desire for a specific type of investment. In some markets, the obligation can be designed to attract long-term institutional investor interest. At other times, the design may make them attractive to individual investors.

## Forms of Securities[34]

State government debt securities can be categorized into two major types, depending on the nature of funds pledged to their repayment:

- **General Obligation Bonds:** These securities are commonly referred to as full faint and credit bonds because they are based on the pledge of the state government to levy taxes necessary to pay the debt. An unconditional promise is made to pay interest; and
- **Limited Liability or "Revenue" Bonds:** Funds to pay interest and retire principal on these securities come only from restricted revenues or user fees. These bonds are classified by what they are not: they are not generally backed by the state's taxing power.

[34] See "Annexure D: Types of Securities" for more information.

## Bond Characteristics: Pledges of Security

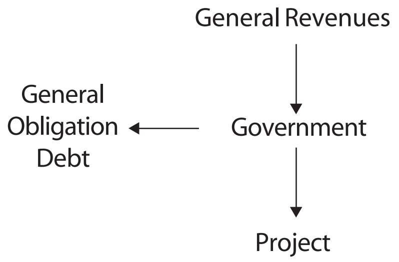
In general, bonds fall under two broad categories defined by the security offered for their repayment: general obligation and revenue bonds, respectively. However, there is a third category called appropriation obligation bonds, which include a state commitment to pay debt service on bonds through annual appropriation of funding.

## General Obligation Bonds

General obligation bonds are backed by the full faith and credit of the issuers for repayment. This repayment pledge is an unconditional promise by issuers to collect taxes or take whatever steps are necessary to assure repayment. Consequently, general obligation bonds are considered to be relatively safe investments and usually carry lower interest rates than revenue bonds, which do not carry this pledge.

General obligation bonds (Figure 1.1) are often limited to constitutionally or statutorily defined

**Figure 1.1: General Government Obligation Bonds**



levels and uses. They often are used to support facilities such as state office buildings and educational institutions. General obligation bonds also may be used to fund the construction of self amortizing facilities (i.e., dormitories). The revenue generated by these facilities is used to meet debt service payments.

## Revenue Bonds

Revenue bonds rely on rents or user fees collected from public enterprises or facilities, or on a designated stream of revenues. The income generated by these enterprises or facilities or a designated revenue stream is the sole guarantee or pledge for repayment from the borrowers. Typical examples of revenue bond supported undertakings include toll roads, bridges, and water or sewer systems. Revenue bonds generally are not subject to the same debt limitations as are general obligation bonds. Because revenue bonds are generally secured by project revenues, or a designated revenue stream, they are considered to be of greater risk than general obligation bonds. As a general rule, revenue bonds carry higher interest rates.

A subclass of revenue bonds is moral obligation revenue bonds. Like other revenue bonds, moral obligation bonds are secured by revenues generated by the enterprise or facility financed. In addition, these bonds are also secured by a pledge to commit funds from tax sources, subject to the legislative appropriation process, if project revenues or the designated revenue stream are insufficient to meet principal and interest payments.

Because of this pledge, moral obligation revenue bonds may have interest costs which are lower than revenue bonds, but higher than general obligation bonds.

## Appropriation Obligation Bonds

In addition to the general obligation and revenue bonds, some states have issued appropriation obligation bonds in order to pay the states unfunded (for example) accrued prior service (pension) liability. Upon issuance of the bonds, the state will make annual debt service payments on the bonds in lieu of each state agency having to make annual payments associated with these liabilities as part of their fringe benefit costs.

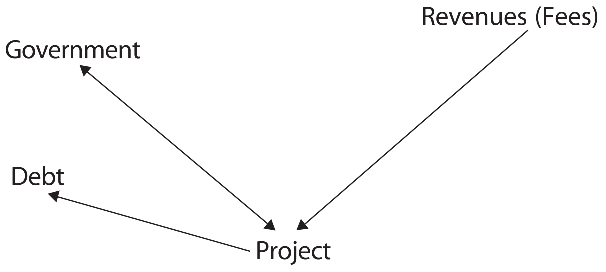
Because bond repayments are subject to appropriation each year, appropriation obligation bonds are not considered public debt of the state and are not supported by the full faith and credit of the state. However, in general, states recognize that they have a moral obligation to fulfill the terms of these appropriation obligation bonds. The debt service payments on appropriation obligation bonds are payable from the general purpose revenue appropriations. The following section presents some special feature bonds.

## Double-barreled Bonds

Double-barreled bonds are bonds that have been issued to build or maintain a revenue producing facility such as a bridge (or toll roadway). The initial debt service is supported by the user fees generated by the facility. However, the revenue generated by the facility may be insufficient to cover the bond's interest and principal payments. As a result, the interest and principal payments will be supported by the general tax revenue of the State.

Bonds that are supported by two sources of financing are called "double-barrel bonds." Because these bonds are backed by the tax revenue of the State, the revenue bonds are rated and trade like general obligation bonds.[35]

**Figure 1.2: Revenue Bonds**




## Short-term Financing

States like other issuers need to obtain short-term financing to manage their cash flow and will generally sell both short-term notes (and, in some cases tax exempt commercial paper). Short-term notes are sold in anticipation of receiving other revenue. The types of short-term notes a state may issue include:

- Tax Anticipation Notes (TANs);
- Revenue Anticipation Notes (RANs);
- Bond Anticipation Notes (BANs); and
- Tax and Revenue Anticipation Notes (TRANs).

A State may also issue tax exempt commercial paper that matures in 270 days or less and may be backed by a line of credit at a bank.

## Bond Characteristics: Repayment Features

General obligation bonds and revenue bonds generally share common payment, maturity, and redemption features.

### Payment and Maturity

Bonds are characterized by their schedules for repayment of principal. For term bond issues, the entire amount borrowed fall due at the same time, as much as 20 or 30 years in the future. The individual bonds that comprise the issues have identical maturity dates and coupon rates. To ensure that repayment funds are available when due, term bonds often provide for sinking funds into which borrowers make scheduled periodic payments.

More common are serial bond issues in which principal is repaid in smaller sums over the life of the issues. The individual bonds may have different maturity dates and different coupon rates. The principal payments may be equal in each year of issue, or have different structures reflecting market conditions at the time of issue or the debt policy of the issues. In addition, the issuers may limit the life of the debt to the useful life of the facility or equipment the bond finances. Capital appreciation bonds are term bonds sold at large discounts from face value. Investors receive all principal and interest at the maturity dates. These bonds are attractive to bond funds and institutional buyers who prefer long-term growth over current income.

### Redemption

Bonds may have call provisions that allow early payment; issuers may redeem the debt before the regularly scheduled maturity date. Issuers may exercise this option if they can borrow new money at lower interest rates than the bonds carry, or if funds become available to retire the debt early. When bonds are called, the borrowers

[35] See Annexure E: Credit Enhancements for details concerning other credit enhancement opportunities.

often must pay predetermined premiums to the bondholders. Although callable bonds generally result in higher borrowing costs for the issuers to compensate investors for increased uncertainty, the option to call bonds at times when market conditions are favorable for refinancing is an important debt management tool.

The inclusion of an optional redemption feature provides the issuer with additional advantages besides the potential for future debt-servicing savings. The early call enables the issuer to alter the maturity schedule of outstanding debt obligations more easily. The payment schedule of outstanding debt may be lengthened to better match the stream of revenues pledged to repay the debt or revised to reduce debt service payments in those years when pledged revenue stream is not expected to be sufficient.

Additionally, the inclusion of a call provision in the original bond issue may enable the state to relieve itself of onerous bond covenants. Limited obligation bonds often curb the issuer's ability to sell additional debt unless certain debt service coverage ratios are satisfied. For example, existing bond covenants may restrict the issuer from selling additional debt, or may require the issuer to raise rates sufficient to generate a level of net revenues inconsistent with the state's financial policies. Once the bonds are redeemed, or legally defeased through an advanced refunding, the issuer can proceed under a new set of covenants.

## Buying and Selling Bonds: The Secondary Market

After the initial placement of new bond issues, the bonds may be bought and sold many times. The trading occurs in the secondary securities market. Because of the decentralized trading and the diversity of the bonds being sold, participants in the secondary trading market rely heavily on bond ratings and yields when making investment decisions.

**Part 2:**

# The Marketing Process

The marketing of a nonSLR state bond issue entails the coordination of several players to take the required steps and to produce documents needed for the sale. The method of sale will dictate which players and process is needed for bond issuance. The method of bond sale will be taken up first. In general, state governments ("Issuers") will have assembled a team to assist in various phases of preparing for the sale and to assist in producing the key sales-related documents. These activities will be discussed following the method of sale section. The final section contains a discussion with respect to obtaining specialized legal, financial, and other services to assist the issuer in the design and selling of securities.

## Method of Sale[36]

The nonSLR state government bond issuer may sell securities in a couple of ways. Unlike the market for corporate debt instruments, in which the sale of securities through negotiation is almost universal, nonSLR bonds are often sold through competitive bidding. In a competitive bid sale, the bonds are awarded at an auction to the underwriting firm that provides the issuer with the best bid for its securities. The bidding parameters are established prior to the sale date and are sued to determine which offer will result in the lowest effective interest cost.

In a negotiated sale, the issuer (state) chooses the initial buyer of its securities (usually an underwriter that plans to reoffer them) in advance of the sale date. The terms of the sale are subject to negotiation between the issuer (state) and the initial purchaser. In many countries (e.g. Australia, United States), state statutes often require certain types of bonds, usually general obligation bonds, to be sold through competitive bidding process.

Under a negotiated sale process, the inherent protections afforded by open competition are generally absent. Although relieved of some duties, the issuer (state) assumes many other roles and duties. For example, a state finance official must monitor market conditions to assure the receipt of the lowest rates of interest, and also must take a proactive role in determining the level of compensation for the underwriter in a negotiated sale (see Table 2.1).[37]

**Table 2.1: Comparison of Negotiated and Competitive Sales[38]**

| | Positive | Negatives |
|---|---|---|
| *Competitive Sales* | • Lowest bid wins<br>• Transparent sales process works well for established issuers<br>• Flexibility to adjust timing or structure | • Limited flexibility<br>• Many not be available to new issuers<br>• Underwriting risk built into cost |
| *Negotiated Sales* | • Allows presale marketing by underwriter<br>• Appropriate for complex issues | • May not result in market price<br>• Potential for corruption |

[36] See Annexure F: Government Debt Instruments and Sales Methods for additional information.
[37] When a DIMC structure is established, the monitoring of market conditions would come from a "Front Office" official.
[38] See World Bank (1999) "Credit Ratings and Bond Issuing at the Subnational Level: Training Manual" Pp 4-25 for more detail.

Several factors should be considered in choosing between a competitive sale and negotiation, including:

- **Complexity of the nonSLR bond issue**. State government securities with complex security features require a greater sales effort on the part of the underwriter. In a competitive sale, the underwriter does not know whether it will have bonds to sell until after the bids are opened. As a result, it maybe unwilling to spend much time and effort on marketing a competitive issue in advance of the sale date. To offset weaker or more complex security features of limited obligation bonds, the issuer may be best advised to identify potential bond purchasers early in the issuance process in order to convince them to make the investment. As a result, the negotiated sale can be preferable if the issue requires a stronger market effort;

**Bonds are characterized by their schedules for repayment of principal. For term bond issues, the entire amount borrowed fall due at the same time, as much as 20 or 30 years in the future. The individual bonds that comprise the issues have identical maturity dates and coupon rates. To ensure that repayment funds are available when due, term bonds often provide for sinking funds into which borrowers make scheduled periodic payments.**

- **Volatility of the bond market**. The volatility of the nonSLR bond market must also be considered in the choice of bond sale method. When state government (nonSLR) securities are subjected to abrupt changes in the interest rates demanded by investors, state government officials may be more comfortable using negotiated sales. When markets are volatile, underwriters may be reluctant to bid aggressively. As a result, competitive sales can result in the receipt of fewer and more conservative bids;
- **Familiarity of the underwriters with the issuers (state governments) credit history**. The familiarity of the underwriter with state government finances, management and credit history has a direct impact on the willingness of underwriters to bid aggressively. General obligation securities of infrequent issuers still can be sold on a competitive basis, but additional effort must be made to familiarize investor's with issuer's creditworthiness; and
- **Size of the issue**. The size of the state's bond issue is the final consideration with respect to method of sale. The probability of attracting many bids for a large issue is limited, especially if financial markets are volatile. A large issue size can induce the formation of bidding syndicates that are sufficiently large as to reduce the number of potential bidders to one or two syndicates. For issues of great size, it is unlikely that the competitive process results in lower costs of capital.

## Basis of Award

In order to determine which one of the competing groups of underwriters is offering to purchase the issuer's securities for the lowest cost, the issuer must determine the effective interest cost of each bid. There are two methods for making this interest cost calculation.

- The first method is a calculation of the bid's effect upon the net interest cost (NIC) of the bond issue. The net interest cost is the average interest cost rate on a bond issue calculated on the basis of simple interest. The aggregate amount of interest payable over the life of the bonds is divided by the aggregate amount of bonds sold, multiplied by the average life of the issue. Although relatively simple to calculate, the NIC has a major deficiency in that it treats a rupee of interest paid today in the same manner as a rupee paid twenty years from now. In effect, this method of calculation does not discount future interest payments.

- The preferred method of calculating the effective interest cost of a bid is the calculation of true interest cost (TIC). The TIC is the rate that will produce a present value equal to the amount of money received by the issuers in exchange for the bonds when it is used to discount all future debt service payments. The use of the true interest cost method of calculating the lowest effective interest cost forces the bidder to eliminate high interest rates or penalty yields on early maturities.

Table 2.2 provides a snapshot of the differences between Net Interest Cost (NIC) and True Interest Cost Method of evaluating the bid process.

Table 2.1 illustrates that NIC looks at the average annual debt cost to the issuer as a percentage of the outstanding debt. The problem with this average calculation, is that the bids can have the same NIC, but cost the issuer different amounts. For example, while the average interest payments may be identical. One bid might involve higher interest payments in the early maturities and lower interest payments in the later maturities, while a second bid may do the reverse. In this circumstance, the first bid would be more costly to the issuer on a present value bases as its higher interest payments must be made sooner.

The True Interest Cost (TIC) takes into account this time profile of interest flow.

## Scheduling Issuance

There are numerous considerations to review before scheduling the sale of debt. In a negotiated sale, the timing becomes less critical because it is much easier to reschedule the sale of bonds until market conditions are more favorable. However, when the bonds are to be sold competitively, the sale date should be selected with great care. Some general rules for

### Table 2.2: Net Interest Cost versus True Interest Cost

| Years to Maturity | Par Value (INR) | Issue A (NIC= 5%, TIC=5.04 %) | | Issue B (NIC=5%, TIC=4.98%) | |
|---|---|---|---|---|---|
| | | Coupon Rate | Annual Debt Service | Coupon Rate (%) | Annual Debt Service (INR) |
| **1** | 1,000 | 12 | 1,190 | 2 | 1,130 |
| **2** | 1,000 | 3 | 1,070 | 5 | 1,110 |
| **3** | 1,000 | 4 | 1,040 | 6 | 1,060 |
| **Total** | **3,000** | | | | |

*Issue A and B: Total interest payments for each issues = INR 300.*
*Issue B: Coupon payments are made later, TIC=4.98 percent.*

Source: Bond Market Association, Fundamentals of Municipal Bonds, 4th ed (New York, PSA, 1990) pp. 181-186; John Mikesell, Fiscal Administration: Analysis and Applications for the Public Sector, 4th ed, (Fort Worth, TX: Harcourt Brace College Publishers, 1995).

selecting an issuance date, include:

- The choice of date should not conflict with the scheduled sale of bonds by SPVs, SOEs or other government of large private corporations that compete for investors;
- The bond issuance date should not fall on a date when GoI is selling its obligations, because this may distract potential investors; and
- Bond issues in many capital markets are sold in the beginning of the week to permit the market sufficient time to sell the obligations before any new issues are presented. In general, Tuesdays are the most popular days for issuing bonds.

Bonds are also most frequently issued on Mondays and Wednesdays.

## Issuance Team

The heart of a bond issuance team consists of the participants that help design, market and develop the documents accompanying the offering. Depending on the markets, the size of the issue, the nature of the sale technique employed, the use of proceeds, the players (and, institutions) involved will differ to some extent. However, the primary roles are generally clear.

At a minimum, the debt issuance team consists of the state government issuer (usually represented by the Chief Financial Officer, and a member of the Front Office of the DIMC), a bond counsel (a specialist in securities law), and a financial advisor (acting in the capacity of a financial specialist to assist in the transaction). If the sale is negotiated, an underwriter is selected by the issuer prior to the sale and becomes a member of the issuance team. An underwriter will not join the team in a competitive offering until the sale is consummated, but will be present during the presale period in a negotiated transaction.

In terms of managing the issuance process and informing the market of a pending sale, the assignment of duties within a team can be distributed in a variety of ways. An early step in the process is an allocation of the responsibilities among team members and the establishment of a calendar of activities. This allocation and coordination of duties maybe done by the issuer, but more likely will be handled by the financial advisor or, in the case of a negotiated offering by the bond underwriter.

## Sales-related Documents

A number of important documents and other information items are generated before and at the time of sale of a newly issued state (bond) security. These sales-related documents include, but are not limited to:

- **Notice of Sale** is an essential document in the issuance of bonds by competitive means. It is an official publication by the issuer that describes the terms of a planned new offering of securities. In most cases the notice of sale contains the date; time; and, place of the sale; the amount of the issue; the nature of the security; information concerning the official state and delivery of bonds; and, the method of delivery;
- **Official Statement** is a (series of) document(s) that is prepared in conjunction with sales of state government securities to provide information to prospective

purchasers of the securities. The official statement functions as the primary disclosure documents. Other terms such as "prospectus" or "offering circular" are sometimes used in reference to the official statement. The offering circular is not the official document of the issuer, but rather an informational piece that may be put out by the underwriter or advisor to generate interest in the proposed financing; and

- **Other Information:** Once the bonds are awarded, the underwriter supplies additional information, including the yields at which the securities are reoffered to the public. The issuer will incorporate the established interest rates into the draft debt service schedules. Once the official statement is modified in this manner, the document is referred to as the final official statement and is delivered to the underwriters for distribution to investors.

## Rating Agencies[39]

Applications for ratings are typically made by the issuer prior to the sale of new issues. If an application is not made and ratings are in effect for outstanding parity issues, the ratings may be withdrawn or the new issues may be rated without a request. In the case of all credit rating agencies, the rating is subject to review by committee, communicated to the issuer (or the state's advisor), and then released to the general public.

**The mechanics of the bond sale will depend upon the method of sale used and will be discussed in the next Part under the subject of underwriters. However, once the terms have been settled and the transaction agreed to, a number of additional steps need to be undertaken. For example, the final official statement needs to be prepared, and should be made available to the underwriters within seven days of the sale.**

## Sale, Reporting Results, and Closing

The mechanics of the bond sale will depend upon the method of sale used and will be discussed in the next Part under the subject of underwriters. However, once the terms have been settled and the transaction agreed to, a number of additional steps need to be undertaken. For example, the final official statement needs to be prepared, and should be made available to the underwriters within seven days of the sale.

Also, immediately after the sale, information about the bonds, if printed in a certificate form, needs to be submitted to the bond printer. In the case of bonds sold in book-entry form (without certificates), the repository must be notified of the results to set up its records. Approximately, three weeks after the sale, the closing is held, at which time the bonds and other sales documents in final form are presented to the winning syndicate and funds are wired to the issuer.

[39] The role of the rating agencies are discussed in greater detail in Part 2: Role of Credit Rating Agencies.

**Part 3:**

# Securing Specialized Services

Most bond issuers retain advisors to assist in the structuring of the transaction and the provision of documents. As discussed above, the specialized services may be limited to the employment of bond counsel, financial advisor, or consulting engineer. As a practical matter, smaller and infrequent issuers are generally more reliant on an advisory team to assist them with the mechanics of issuing debt. The bond counsel, financial advisor, and in the case of a negotiated transaction, the underwriter and its counsel are the most common outside advisors in the debt issuance process. Another important player in a transaction may be the provider of a credit enhancement, which may be represented by its own legal counsel. This section reviews the general roles and activities of the key players in the state bond issuance process.

## Bond Counsel

In both negotiated and competitive sales, bond counsel may perform numerous duties, but its traditional responsibilities revolve around providing an opinion on the validity of the issue. Bond counsel also prepares and reviews sundry legal documents such as the form of the bond and the transcript of the sale of the bond. The primary responsibility and activities of bond counsel typically are as follows:

- Determining whether there is legal authority to issue the bonds;
- Drafting the bond ordinance, resolution, or, in the case of revenue bonds a trust indenture;
- Examining transcripts of proceeding to determine that bonds were legal offered and sold;
- Determining that bonds were properly executed; and
- Answering any legal questions about the bonds by prospective purchasers.

In negotiated transactions, the bond counsel's role may be supplemented by the underwriter's counsel, which has primary responsibility for the assembly of the disclosure documents in a negotiated sale and the provision of a disclosure letter that opines on the adequacy of disclosures. The client of the underwriter counsel is the underwriter. The issuer's (state government) counsel may be involved in the preparation of disclosure information, but the role is largely limited to opinions regarding the organization and good standing of the issuer and various procedural matters.[40]

**The principal role of a financial advisor to a state government is to provide assistance to issuers on matters relating to the issuance of state government securities. Typically, the nature of that assistance depends upon the method of sale. In a competitive sale, the financial advisor assists the issuer in designing the debt structure, preparation of the official statement, and marketing of the securities to potential investors.**

## Financial Advisor

The principal role of a financial advisor to a state government is to provide assistance to issuers on matters relating to the issuance of state government securities. Typically, the nature of that assistance depends upon the method of sale. In a competitive sale, the financial advisor

[40] Other counsel may become involved in the transactions, such as that of a credit enhancing entity.

assists the issuer in designing the debt structure, preparation of the official statement, and marketing of the securities to potential investors.

The nature of the financial advisor differs when state government bonds are being sold through negotiation. In a negotiated sale, the advisor acts as an advocate for the client government to assure that the underwriter is treating the state government fairly. An important duty of the financial advisor may be to assist the state government in the selection of the underwriter. In negotiated transactions, the bonds are structured by the underwriter, whose own marketing staff contacts institutional and retail investors directly.

During the pricing of the bonds, the financial advisor may be used by state government officials to provide assurances that the interest rate scale for the proposed bond issue is reasonable in light of existing market conditions.

## Underwriter

The role of the underwriter ("the banker") is to purchase the bonds from the issuer and to sell (reoffer) them to investors. The exact nature of the underwriter's role depends upon whether the issue is negotiated or sold competitively. If the issue is negotiated, the underwriter may perform many of the consultative and support roles performed by the financial advisor, such as structuring the issue, preparing the disclosure information, and obtaining ratings from the rating agencies.

On most large issues, the managing underwriter will form a syndicate that will offer the issuer a price at the sale date. Other members of the syndicate will be securities firms or banks that, depending on the nature of the underwriting agreement, will have the opportunity to reoffer the bonds, but will also assume responsibility that the sale will raise the needed funds on a timely basis.

In a negotiated sale, the syndicate knows that it will get the bonds and therefore will be able to discuss the issue before their offering with potential investors, feeding back information, and in some cases influencing the design of the bond issue to meet market specifications. The final purchase price is decided upon when a firm's bond purchase agreement is submitted to the issuer. A major advantage with respect to negotiated sales is that of timing, since the sales date is flexible and can be decided quickly.

In a competitive sale, the underwriters or syndicates bid against one another. Generally, the underwriters decide on bids by reviewing how comparable issues are doing, canvassing potential purchasers, noting the overall supply of bonds on the market, and making a judgment about the level of competition for the offering. Key to an underwriting by competition are the rules, established in the notice of sale and the bid form, that are to be used in comparing bids (basis of sale), restrictions carried on the coupon rates, and whether the bonds can be sold at discount.

Underwriters are generally compensated for their efforts in different ways. In a negotiated sale, the underwriter receives a gross spread or discount that is a percentage of the face amount of the bonds and may be expressed, for example, as 1 percent per 100 Rupee bond. In a competitive sale, the compensation may come either from buying the bonds at discount or from buying them at par and reoffering them at a premium. In either case, the lead underwriter will be paid more, in the form of a management fee, than other members of the syndicate to compensate for its management services and will also be reimbursed for issue-related expenses. Other members of the syndicate will receive sales commissions (takedowns), as will dealers that assist in the sales efforts (concessions).

## Trustees and Paying Agents[41]

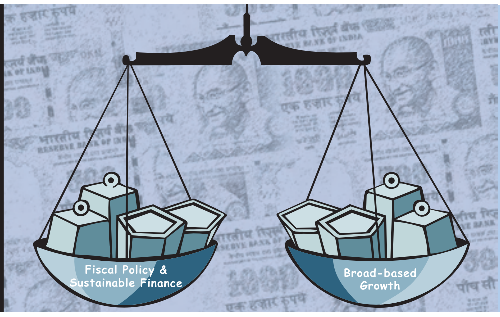
The function of trustees and paying agents will vary in many countries depending on their legal authority. In some circumstances, trusts are established as independent legal bodies that insure that all parties involved in a financing plan comply with the terms and conditions of the legal documents prepared for the transaction. In other cases, a trust provides a guarantee for debt service payments and/or it collects and distributes the revenues used to make interest and principal bond payments. Trustees can retain collateral used to secure a transaction.

The paying agent is responsible for distributing payments on issued bonds from the issuer to the bond holders. It also maintains records of bondholders. The paying agent is in most cases a bank.[42]

## Cost of Services

The use of specialized services entails costs that, in conjunction with a bond sale, are termed costs of issuance. In addition to the major advisors listed above, other activities including printing and professional services (e.g. accounting) are carried out in support of a bond issuance and may be capitalized into the issue and paid from bond proceeds. In general, the largest component of costs is that paid to the underwriter.

[41] See World Bank (1999) "Credit Ratings and Bond Issuing at the Subnational Level: Training Manual" Pp 4-19 for more detail.
[42] Ibid Pp 4-19.




Section V

# Evaluation and Monitoring Oversight

**Part 1:**

# Monitoring and Oversight of State Government Debt

The decentralization of governments throughout the world has brought new prerogatives and responsibilities to state and local governments as service providers to their local constituents. The decentralization of government finances has prompted increasing reliance on financial markets, private provision of many activities formerly carried out by governments, and an increasing emphasis on using private capital markets as an efficient allocator of credit. State and local governments are being required to do more things and to be more self-reliant in raising revenues. Hard-pressed budgets have constrained the ability of central governments to provide for the needs of state and local governments.

The political and financial relationships between central, state and local governments are rich and varied. These relationships are evolving along new lines, many of them unique to a given country's tradition and position along the decentralization (and devolutionary) scale. National government oversight and intervention in state (and local) government financial systems vary fundamentally:

- In federal systems important prerogatives are left to the states (and their local governments); and
- Unitary governments have strong sovereign centers.

## Overview of the International Experience

The United States, Canada and many Latin American countries, for example, have a federal system of government with specific powers and prerogatives reserved for each level of the government. Although often possessing some degree of independence, local governments are subordinated to state and provincial governments. In unitary systems, all powers of the state are derived from the central government, which has oversight overstate and local governments. Rather than a prescribed, singular approach to monitoring of subsovereign financial conditions, there are many different approaches that have been utilized by various political systems.
A nonexclusive list of international experiences is given below:

### Argentina[43]

Historically, Argentina has a highly decentralized system of government with significant powers given to provincial governments. Much like the U.S. and Canadian systems, the provincial governments are the parents of local governments. The central government raises taxes, most of which it then transfers to the provincial level to provide services.

The financial structure places substantial emphasis on the intergovernmental transfer mechanism. All three levels of government are permitted free rein to borrow. Many subnational governments have borrowed funds to cover operating deficits. In the 1990s, the central government stepped in to bail out the provinces and cities by replacing subnational debt with national debt. The national government closed the window on provincial bank lending to provincial governments.

[43] This discussion has been obtained from Mila Freire and John Peterson "Subnational Capital Markets in Developing Countries: From Theory to Practice" World Bank, 2004, pp 159-161.

However, the provinces have continued to borrow from private banks and to pledge future intergovernmental transfers. A recurring problem has been a lack of discipline in borrowing to cover current deficits. Since the provinces (and municipalities) have a high degree of independence, the central government's ability to control (and monitor) their behavior is limited. In anew approach, the federal government and the provinces have entered into numerous agreements intended to control provincial spending and borrowing.

### Brazil[44]

Brazil's constitution provides nominally equal status to all three levels of government. As in Argentina, the lack of effective control by the central government lead to increasing levels of indebtedness by the states and the two largest cities, followed by widespread defaults in the 1980s. The debts were rescheduled by the central government to convert short-term to long-term debt.

A major problem was that the national government had no effective control over the amount of debt incurred by subnational governments. As in Argentina, negotiations between the state and central government are ongoing. However, since 1998 and the passage of the Fiscal Responsibility Act, the central government has curbed imprudent state (and local) government level fiscal behavior and established tight conditions for subnational government borrowings.

### United States (California)

The United States has a federal system of government with specific powers assigned to each level. Even though many local governments possess some degree of independence, they are subordinated to state governments. Oversight and intervention by the states in the affairs of local governments vary greatly in the United States. However, in the case of state-level fiscal distress, the states are largely left on their own to resolve their budgetary issues.

For example, California is weathering a fiscal crisis largely created by increases in operational spending combined with a general reduction in government revenues. This has forced the state to impose spending controls, and refinancing its current debt obligations. These actions were largely undertaken without the intervention of the central (federal) government.

## Best Practices and Disclosure Standards[45]

The following section presents best practice reporting and disclosure standards to assist states and local governments in more effective debt management practices. Best practices that promote efficiency in government reporting and solvency have been promoted by the Government Finance Officers Association (GFOA-US) and the National Advisory Council on State and Local Budgeting (NACSLB). These best practices include the following:

- Fund balance reserve policy/working capital reserves;
- Multiyear financial forecasting;
- Monthly or quarterly financial reporting and monitoring;

[44] For more detail see Mila Freire and John Peterson "Subnational Capital Markets in Developing Countries: From Theory to Practice" World Bank, 2004, p 161.
[45] The following section(s) largely paraphrases Fitch Ratings "The 12 Habits of Highly Successful Finance Officers" November 21, 2002, pp 3-7.

- Contingency planning policies;
- Policies regarding nonrecurring revenues;
- Debt affordability reviews and policies;
- Superior debt disclosure practices; and
- Rapid debt retirement policies (greater than 65 percent in 10 years).[46]

According to Fitch Ratings, the above-mentioned list of positive financial management practices had the most beneficial effect on creditworthiness. A number of items on this list touch on greater disclosure, such as an issuer's receipt of awards for excellence on financial reporting and budgeting. We examine the list in more detail below:

### Fund Balance Reserve Policy/Working Capital Reserves

Maintaining an operating reserve fund is considered perhaps the most effective practice an issuer can use to enhance (protect) its credit rating. It is also the most frequently implemented practice, adopted by both large and small government issuers. The capital reserve fund provides a defense against deficit spending and helps maintain liquidity when budgeted drawdowns become inevitable. The appropriate size of such a reserve largely depends on the variability of the revenues and expenses, as well as the working cash needs of the government entity to handle seasonality of revenues/expenditures.

### Multiyear Financial Forecasting

The practice of forecasting operating revenues and expenditures over several years has developed from issuers experiencing fiscal stress. However, multiyear financial forecasting has had beneficial effects long after a financial crisis has passed. A multiyear plan allows legislators and executives to anticipate potential budget stress that may result from projected revenue and expenditure imbalances, allowing them to take corrective action long before budgetary gaps develop into a crisis.

### Monthly or Quarterly Financial Reporting and Monitoring

Interim financial reporting can block the progress of impending fiscal stress if the financial management system is calibrated properly. The best interim reports provide details on the issuer's major tax and revenue sources, with variance analysis that shows the factors that are affecting revenue inflow. In addition, interim reports that present current month spending, for the year to date, and in comparison with the budget are also essential.

## Contingency Planning Policies

Demonstration by an issuer of foresight and planning against unforeseen events is viewed positively. Many future challenges can be anticipated. Each year, in a number of U.S. states, voter initiatives are presented that propose revenue limits or reductions that can potentially (and dramatically) change an issuers financial flexibility. Issuers should have meaningful contingency plans against the possibility of such changes. In addition, governments should consider establishing contingency plans in the event that budget assumptions prove erroneous.

[46] See Fitch Ratings "The 12 Habits of Highly Successful Finance Officers" November 21, 2002.

## Policies Regarding Nonrecurring Revenues

Over reliance on nonrecurring revenues to paying ongoing and recurring expenses is a credit concern, since it frequently contributes to budgetary stress and fiscal structural imbalances. Nonrecurring revenues can be sales of fixed assets, budgetary savings from a debt refinancing, or tax collection windfalls. From a credit perspective, nonrecurring revenues are best used for onetime or discretionary spending that will not entail spending pressures in future years.

## Debt Affordability Reviews and Policies

Strong debt management practices are evidenced by comprehensive debt policy statements that discuss the types and methods of financing employed by an issuer. These should include an issuer's policies regarding off-balance sheet financing (i.e., lease debt) as well as bond anticipation notes and tax and revenue anticipation notes. Policy statements should also set forth any self-imposed debt limitations.[47]

Related to debt affordability, an issuer should consider its overall exposure between invested assets and external debt issuance. Increasingly, government issuers are balancing short-, medium- and long-term investments with a mix of short- and long- term debt. A state government should engage in a proactive asset liability management policy that includes, but is not limited to:

- Identification of debt and investment management products that are acceptable to the debt issuer;
- Expected benefits of selected financial products in light of potential interest rate volatility;
- Sources of funds available for potential swap termination payments;
- Designation of individuals responsible for negotiating, monitoring, and reporting market conditions, and their impact on variable and fixed rate debt, investments; and
- Any other financial products under consideration.

## Superior Debt Disclosure Practices

Superior debt disclosure practices go beyond the documentation required to successfully undertake a new issuance in bonds or notes. Some examples of superior disclosure that are not standard items in a financial report include:

- Delineation of financial management policies;
- Specific history of pledged tax or revenue streams that back revenue bonds;
- Charts depicting required and actual revenue bond coverage (calculated per the bond indenture formulas);
- Compliance with key indenture items, such as covenants, reserve funds, and/or renewal and replacement funds;
- Use and performance of interest rate swaps, including market-to-market value; and
- Annual updates of operating data for enterprises, such as fees, customer trends and service volume.

[47] The State of Maryland (U.S.A.) has established a debt affordability policy.

## Rapid Debt Retirement Policies

One tenet in effective debt management is that the life of debt should not exceed the useful life of the asset or the project being financed. However, useful life should not be the only benchmark considered when structuring the maturity of an issuer's debt. For example, an issuer that frequently sells 30-year debt or continually extends existing maturities of its debt through refinancing and restructuring may still manage to match debt and useful life. However, from a credit perspective, an issuer that pays off its debt rapidly (65 percent or more of principal in 10 years) will be reviewed more favorably than a similar issuer that retires only 50 percent of its debt over 10 years.

Issuers that stretch out their debt through ascending debt service maturities or heavy use of capital appreciation bonds reduce their financial flexibility. For example, a number of local governments in the U.S. restrict the final maturities on tax supported debt to 15 years, resulting in a debt amortization rate of 89 percent over 10 years.[48]

## Dealing with Default

The international experience with respect to dealing with default varies significantly. Some government have institutionalized default procedures within the constitution (e.g., Hungary and South Africa) while others have developed a number of laws dealing with default remedy procedures.

What is default? Default is defined as a missed or delayed payment by an issuer in breach of the agreed terms of the issue. In general, all credit rating agencies and financial institutions use similar definitions of default.

For most subnational (state and local) governments, the development of early and accurate detection of problems is the best remedy to stave off default. Further, rating agencies and lenders view the adoption of a state-level debt monitoring procedures as an important element in managing debt and avoiding default. Once problems are accurately detected and their underlying causes diagnosed, the swift and effective correction of those problems requires the development of credible plans specifying one or several series of correction measures and allocating authority and responsibility for carrying out these plans, within agreed upon time frames.

State governments should determine who would be the primary point person that creditors should deal with on a day to day basis in the event of a potential debt default. Further, a state level financial recovery plan must be aimed at securing the state's ability to meet its obligations to provide basic services or its financial commitments, and such a plan, whether mandatory or discretionary intervention, must:

- Identify the financial problem;
- Be designed to place the state in a sound and sustainable financial condition as soon as possible;
- State the principal strategic objectives of the plan, and ways and means for achieving these objectives;

[48] ICRA responded to this section on rapid debt retirement polices by stating that shorter average loan maturity may not necessarily be positive from the credit perspective at all times. Rapid debt retirement practices must be seen in context of various other practices including the pattern of regular cash flows, available financing options and investment plans.

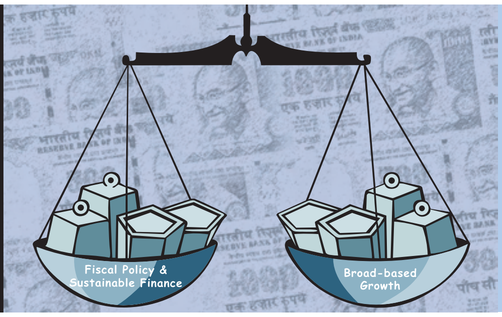
- Set out a specific strategy for addressing the financial problems, including a strategy for reducing unnecessary expenditure and increasing the collection of revenue (as may be necessary);
- Identify the human and financial resources needed to assist in resolving financial problems, and where those resources are proposed to come from; and
- Describe the anticipated time frame for financial recovery, and milestones to be achieved.

In addition, the recovery plan must be able to:

- Provide for the liquidation of specific assets, excluding those needed for the provision of the minimum level of services;
- Provide for debt restructuring or debt relief;
- Provide for special measures to prevent unauthorized and/or wasteful expenditures and other losses; and
- Identify any actual and potential revenue sources.

Furthermore, a financial recovery plan must:

- Set spending limits and revenue targets;
- Provide budget parameters which bind the government for a specified period or until stated conditions have been met; and
- Identify specific revenue raising measures that are necessary for financial recovery, including the rate at which taxes and tariffs must be set to achieve financial recovery.




Section VI

# Guidelines and Recommendations

**Part 1:**

# Concluding Observations and Guidelines

State government market borrowing has largely been limited through the Reserve Bank of India (RBI). However, the Twelfth Finance Commission's recommendation to discontinue loans to state governments for plan funding will require Indian states to mobilize larger resources from the market. State government borrowing is not an end in itself. Ideally, it should be used to obtain long-term capital for expenditures that provide benefits that stretch into the future. Repaying state government debt represents the fulfilling of an intergenerational contract obligating those who benefit from the capital investment to pay their share of the costs. Successfully incurring and repaying debt is an affirmation that state governments are capable of planning for the future and fulfilling their obligations.

Credit market access has been approached from various angles in this Guide including: the potential needs of state government borrowers, the organization and regulation of the financial market, the likely investor groups, the need for information to analyze credit, credit rating and how state's can go to market under a competitive versus negotiated sales method. This section provides some concluding observations and general guidelines with respect to improving the Indian state government securities market.

## Expanding the Playing Field for State Securities

In promoting the Indian state government securities market, the governing laws and regulations should make clear the legal status and remedies available to investors in state government obligations. The security and enforcement process should be explicit and easy to call on. However, in designing the security and enforcement procedures, the regulators must be somewhat flexible in establishing the boundaries of prudential behavior. In addition to developing security provisions to meet general requirements, parties to state debt transactions should be able to design security provisions to meet specific needs and circumstances. Other elements that are essential for expanding the demand for state securities include:

- The financial marketplace should be free to work with state governments to decide on the types of instruments and associated payment structures to employ;
- Wherever possible, it is best to introduce and promote competition into the state securities market; and
- Public and timely reporting on the terms, conditions and other provisions of loans and bond offerings is a necessary complement to supporting a competitive state securities market regime.

Even in places where the securities market is not fully developed, and effective competition is limited, the bidding process and full disclosure of transactions should encourage participation in the debt market.

## Financial Market Regulation and Disclosure

A key concern in securities market regulation is proper financial disclosure. State government securities should be subject to disclosure standards that require both information at the time of the initial offering and regular reporting to investors subsequently. State government financial information needs to be promptly disclosed after the close of the fiscal period in clear, consistent formats. For debt monitoring purposes, reporting on a modified accrual basis is essential (as are cash flow statements).

A central repository (e.g., DIMC) of financial information on government borrowings is an essential tool in promoting efficient disclosure. The repository should have current data on debt outstanding and information on security pledges and liens.

The following measures are recommended for improving the financial disclosure (and, hence the creditworthiness) of the state governments:

- The FRL should provide for a mandatory Debt Management Plan to be prepared over a period of three-five years to ensure achievement of the various targets for prudent debt management;
- There should be a detailed capital budget providing for all capital expenditure forecasts for the state governments;
- The debt sustainability norm as put forth by the GoI should be strictly adhered to. This should be established in the form of a Government Order (GO);
- State governments should ensure that they have details of all information pertaining to their assets, particularly financial assets and liabilities; and
- There should be a system ensured through a rule under a statute for maintaining complete detail of all loans guaranteed by the government as well as all loans for which the repayment liability falls on the government.

## Credit Analysis and Ratings

Credit analysis is a product of the credit market's need to assess state government financial risk, whereas, credit ratings are the leading form of institutionalized credit analysis. Credit analysis and ratings play an important role in expanding state government securities instruments. Credit ratings focus on credit risk (risk of payment default) which then is used to help determine overall risk and reward. A financial market only becomes viable when there is a variety of competing investors, and investments with different risk and reward characteristics.

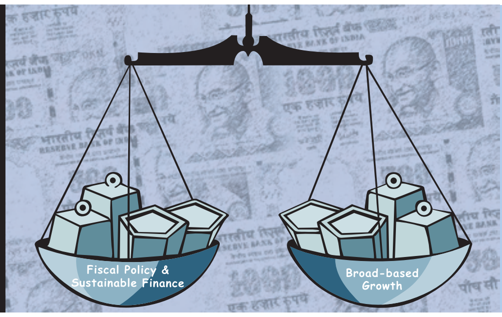
Credit ratings have the benefit of ranking state governments on their perceived ability and willingness to pay their debts and avoid financial stress. Credit ratings are relatively easy to understand, hence their popular appeal with institutional investors in the capital market. The broad based appeal of credit ratings represents a catalyst for state governments, providing an incentive to upgrade their credit rating.

## Other Issues

A regular and universal reporting system for state governments founded on an accounting system (modified accrual) relevant to the information needs of investors and prepared by properly trained officials is a prerequisite for market development. Most important is the ability to report direct and contingent debts outstanding, current state debt service requirements and cash funds available to meet these demands as well as baseline operating expenses. While the ability to support many other measures of performance and conditions is desirable, reliable baseline data on pending state debt obligations and reporting needs are indispensable to developing the state debt securities market.

The following Annexures provide greater detail on the organization and operation of Debt Reform:

- Annexure 1 describes the Financial Market Structure;
- Annexure 2 discusses Strategic Benchmarks on State Debt;
- Annexure 3 defines the Liquidity according to the Bank for International Settlements;
- Annexure 4 describes the Types of Securities available to state governments;
- Annexure 5 discusses the ways to enhance credit;
- Annexure 6 contains a Table summarizing Government Debt Instruments and Sales Methods;
- Annexure 7 discusses the Minnesota State Debt Management Policy;
- Annexure 8 provides a road map on how to set up a Debt and Investment Management Cell and implement the CS-DRMS software;
- Annexure 9 provides a list of virtual links to Web sites related to Public Debt Management;
- Annexure 10 contains a Bibliography; and
- Annexure 11 contains a detailed report on the REFORM Project and Investment Management experiences in Jharkhand, Karnataka, and Uttarakhand.




# Annexures

## Annexure 1:
# Financial Market Structure

This Annexure focuses on the guiding principles of approaching the market by a subsovereign entity in India. Moreover, this Part details different types of subsovereign borrowing in India. Government securities have contributed to the development and functioning of financial markets around the world in part because of their liquidity.[49] In highly developed markets (e.g., the United States) examples of their importance include:

- Government debt forms part of bank regulatory capital and in many countries guidelines or direct quantitative regulations of private pension funds specify minimum compulsory investment shares in government securities;
- Governments (reflecting their taxation power) provide securities with negligible credit risk; and
- Government debt is often a critical component of strategies aimed at reducing portfolio risk.

By making state government securities relatively straightforward, tailoring their maturities to meeting market demand, and announcing borrowing plans in advance, state governments can make their securities more attractive to investors. This Part seeks to review the nature of a (state) government debt market including selling procedures and distribution channels.

Indian financial markets consisting of the equity and debt markets underwent a huge transformation in the 1990s and continue to evolve. While the equity market in India has reached a state maturity and depth that can be compared to any developed country, the debt market is not fully developed. The debt market has mainly two segments: the government (both central and state governments) securities which are SLR securities and the corporate securities which may be called the NonSLR bonds (See Figure 1A.1). The central government securities market has grown substantially since the early 1990s but the corporate securities market is yet to take off. The study of the development of the central government securities market provides an important step in the analyzing the way forward for the states which are planning to approach the market for their future borrowing needs.

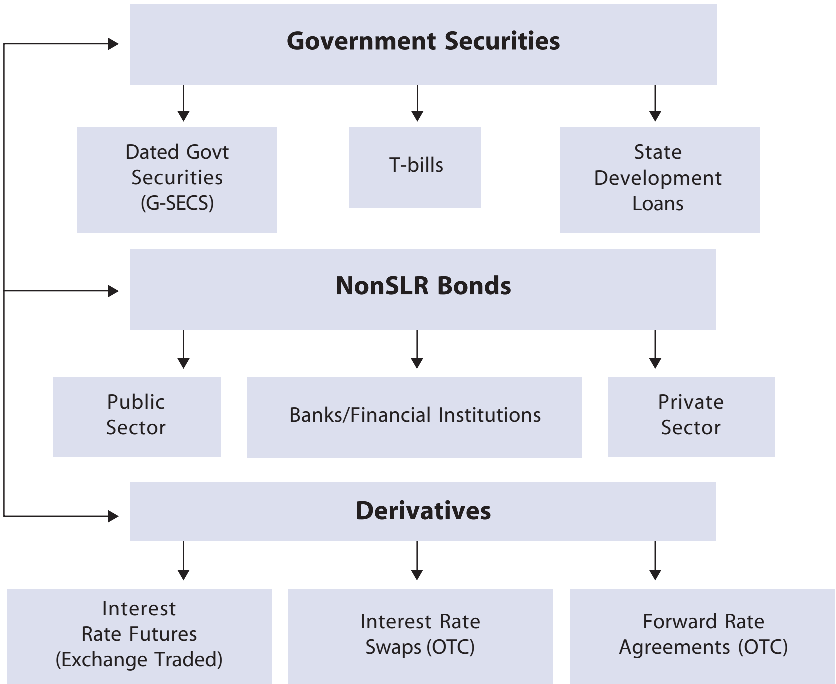
Market borrowing is not anything new for Indian states as it already constitutes an important component of borrowing. However, the nature and quantum of such borrowing is going to undergo substantial change. At present, market borrowing for the states is conducted by the Reserve Bank of India and is done simultaneously for all states and its subscription (price and quantity) does not really reflect the financial strength (creditworthiness) of each state. The future borrowing by states from the market, in contrast, will have to be organized by the states themselves based on their own financial strength or creditworthiness. In this connection, it is most useful to understand how the central government market borrowing has evolved over the years.

## Indian Debt Market

The government dominates the Indian debt market with about three quarters of resources

[49] See Annexure 3: BIS Definition of Liquidity.

**Figure 1A.1: Indian Debt Market**




Source: Madhav (2006).

mobilized in this market by the central and state governments. Thus out of a total of INR 2,04,881 crores raised through primary debt issues during 2004-05 about 71 percent was mobilized by the government alone (Table 1A.1). The predominance of government securities is nearly complete in the secondary market with their trading volumes almost 98-99 percent of the total during 2003-04 and 2004-05. The debt market is fundamentally a wholesale market in India. As far as regulation is concerned, while the Reserve Bank of India (RBI) regulates the government securities market, the corporate debt instruments traded on the stock exchanges are regulated by the Securities Exchange Board of India (SEBI).

**Table 1A.1: Debt Market: Selected Indicators**

*(INR Crores)*

| Issuer/ Securities | Amount Raised from Primary Market | | Turnover in Secondary Market | |
|---|---|---|---|---|
| | 2003-04 | 2004-05 | 2003-04 | 2004-05 |
| 1. Government | 1,98,157 | 1,45,602 | 26,79,208 | 29,55,263 |
| 2. Corporate/Nongovernment | 52,752 | 59,279 | 42,262 | 38,419 |
| **3. Total** | **2,50,909** | **2,04,881** | **27,21,470** | **29,93,682** |
| 4. Government to Total (1/3) % | 79.0 | 71.1 | 98.4 | 98.7 |

Source: NSE (2005).

## Market Participants and Instruments

Table 1A.2 broadly summarizes the present structure of Indian debt market. It provides the mix of issuers, investors, instruments and their maturities in the debt market.

## Primary Dealers

The selection of the appropriate marketing and distribution channel for state government debt instruments should ensure cost-effectiveness; maximize participation from a broad range of investors; maximize competition; minimize placement risk; and foster transparency. For many countries with developed capital markets, government bond auctions are the primary sales technique. Countries may also choose to sell government debt in the form of syndication(s), underwriting, or private placements.

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The use of primary dealers is considered to be a more competitive arrangement for the issuance of government securities than the use of syndication or underwriting. Primary dealers tend to shrink commissions when markets become more competitive to maintain market

### Table 1A.2: Structure of Indian Debt Market

| Issuer | Instruments | Maturity | Investors |
|---|---|---|---|
| Central Government | Dated Securities | 2-30 Years | RBI, Insurance Companies, Provident Funds, Mutual Funds, PDs |
| Central Government | T-bills | 91/364 Days | RBI, Banks, Insurance Companies, Provident Funds, Mutual Funds, Individuals, PDs |
| State Government | Dated Securities | 5 -13 Years | Banks, Insurance Companies, Provident Funds |
| PSUs | Bonds, Structured Obligations | 5-10 Years | Banks, Insurance Companies, Provident Funds, Mutual Funds, Individuals, Corporates |
| Corporates | Debentures | 1-12 Years | Banks, Mutual Funds, Corporates, Individuals |
| Corporates, PDs | Commercial Papers | 15 Days to 1 Year | Banks, Mutual Funds, Financial Institutions (FIs), Corporates, Individuals, Foreign Institutional Investors (FIIs) |
| Scheduled Commercial Banks, Select FIs | Certificates of Deposits | 15 Days to 1 Year for Banks and 1 Year to 10 Years for FIs | Banks, Companies, Individuals, FIIs, Corporations, Trusts, Funds, Associations, FIs, Non-Resident Indians (NRIs) |
| Scheduled Commercial Banks | Bank Bonds | 1-10 Years | Corporations, Individuals, Companies, Trusts, Funds, Associations, FIs, NRIs |
| Urban Local Bodies | Municipal Bonds | 0-7 Years | Banks, Corporations, Individuals, Companies, Trusts, Funds, Associations, FIs, NRIs |

Source: NSE (2005).

share, while the fees in syndication remain fixed for the agreed upon period. The Government of India has established a "Primary Dealer System" to promote liquidity for government T-bills and bonds in the market. Under this system, a group of financial agents is chosen with the stated objectives of fostering growth in the primary and secondary market for these securities. These dealers have obligations to the government and enjoy some privileges which enhance their own incentive to develop the market.

Primary Dealers (PDs) have become the backbone of the government securities market in developing countries in general and India in particular. The system of Primary Dealers (PDs) was introduced in India in 1996 for underwriting primary issuances of government securities and for market making in the secondary market. There were 17 PDs in operation at the end of March 2005. Some of them are promoted by public sector banks and financial institutions, and some by foreign banks and foreign security houses. PDs are obliged to provide annual bidding commitment, underwriting primary issuance and offering two-way quotes. In return, they are provided with liquidity support by the RBI and access to call money market as borrowers and lenders. In addition, PDs can raise resources through Commercial Papers (CPs) and can take recourse to borrowing from commercial banks. The amount of absorption by PDs in the primary market of government securities and in the secondary market in India has been rising over the years. As part of the Fiscal Responsibility and Budget Management (FRBM) Act 2003, the RBI cannot participate in primary issuances of government securities effective April 2006 and this entails further enhancement in the role of the PDs in primary auctions.

## Investor Base

A key challenge confronting many countries is how to broaden the investor base so as to reduce the heavy reliance on a captive market. A broader investor base improves market liquidity not only because of the (increasing) size effect but also because having a large number of investors with diverse risk profiles enables smooth dissipation of market shocks. In addition, a large investor base generates incentives for financial innovation.

The growth in local institutional investors such as pension funds, insurance companies, and mutual funds is crucial in driving the demand for government securities. A diversified investor base with varied demand requirements, maturity profiles, and risk preference is important to ensure high liquidity and stable demand in the market. In mature markets, the investor base is generally well-diversified with banks, mutual funds, hedge funds, pension funds, and insurance companies providing a broad demand base for bonds. In many emerging market countries, many of these financial institutions are underdeveloped and the growth of such an investor base has been slow. The investor base in Indian debt market is indicated below:

- *Banks* constitute the major investor base in the Indian debt market particularly the government securities market. They are also the main participants in the call money and term money market as well as the repo market. Banks also issue Certificate of Deposits (CDs) and bonds. Moreover, they arrange issues of Commercial Papers (CPs) of corporate entities;
- *Mutual Funds* have become large participants in the debt market mobilizing

substantial amounts from investors. Mutual funds also have specialized debt funds known as gilt funds and liquid funds which invest and trade on their portfolios on a regular basis;

- *Insurance Companies;*
- *Foreign Institutional Investors (FIIs)* are also allowed to invest in government and corporate securities up to certain limits;
- *Provident and Pension Funds* are also important investors in the debt markets. The prudential regulations mandate their investments predominantly in government and public sector bonds. They normally hold their investments till maturity and hence not very active in the secondary market;
- *Charitable institutions, trusts, and societies* are also large investors in the debt market; and
- *Retail investors* have been permitted since January 2002 to submit noncompetitive bids at primary auctions through any bank or PD. They can submit bids for a minimum of INR 10,000 and a maximum of INR 1 crore. The total noncompetitive bids up to a maximum of 5 percent of the notified amount are accepted at the weighted average cut off price/yield.

## Issuers of Securities

The major issuers in the debt market are the central and state governments, public sector units, and the private corporates. There are other issuers like local governments and mutual funds which tap the market infrequently. International financial institutions like Asian Development Bank have also entered the domestic market recently.

## Primary Issuance Process

Government securities are issued mainly through two methods in India:

**The growth in local institutional investors such as pension funds, insurance companies, and mutual funds is crucial in driving the demand for government securities. A diversified investor base with varied demand requirements, maturity profiles, and risk preference is important to ensure high liquidity and stable demand in the market.**
**In mature markets, the investor base is generally well-diversified with banks, mutual funds, hedge funds, pension funds, and insurance companies providing a broad demand base for bonds.**

1. Tap issue.
2. Auctions sale.

In tap issue, the Reserve Bank of India, on behalf of GoI or state governments announces sale of securities at a *fixed* price or coupon rate. There is no indication of the aggregate amount of issuance in the notification for a tap issue. Sale may be extended to more than one day or closed any time on any day.

*Auctions* have become the primary channel for issuing government securities in many international debt markets because they have proved to be more cost affective and transparent than other methods. In the case of the auction, it can be either on a price or on a yield basis. In a *price-based* auction, it will be for the reissue of *existing securities* with a predetermined coupon. The bidders should quote price per INR 100 of the face value of the security. Bids at cutoff price or higher are accepted and bids below the cutoff price rejected. In a *yield-based auction,* bids are invited for deciding the coupon rate of *new securities*. The coupon of the security is determined in the auction and the security carries the same coupon till maturity. Based on the bids received, the RBI decides the cutoff yield; bids above the cutoff yield are rejected and bids at cutoff yield or below accepted.

There are two alternative methods of allotment in auctions: "uniform price" or "multiple price" allotment. In the former, successful bidders are allotted securities at the cutoff yield or price. For the "multiple price" allotment, successful bidders are given securities at the bidding price or yield: at cutoff yield or below in case of a yield-based auction and at cutoff price or above in case of a price-based auction.

In multiple price auctions, the issuer orders bids by price in descending order and accepts the higher bids until the issue is exhausted. Each winning bidder pays the price that it bid. Auctions are sometimes combined with issuance through a set of primary dealers who also act as underwriters. These primary dealers are also used to enhance the price discovery process through the requirement of continuous two-way quoting (market making). The combination of primary dealers and multiple price auction systems have been linked to the opportunity for primary dealers to acquire a large fraction of new issues by aggressive bids, which then allows them some market power.

**The states have the option of raising any part of their allocation for market borrowing through auctions. However, most of the states currently raise resources through tap issuances. The share of the auction route fell from 13-15 percent during 2000-02 successively to about 2 percent in 2004-05.**

In uniform price auctions, the issuer orders bids in descending order (similarly to multiple price auctions), and accepts only those bids that allow full absorption of the amount up for the issue. In uniform price auctions, all successful bidders pay the price of the lowest successful bid. In both multiple price and uniform price auctions, the lowest accepted price is the cutoff price.

Multiple price auctions have advantages for the issuer, including they maximize revenue for a given demand curve.[50] This is subject to what is called the "winners curse." By contrast, in a uniform price auction, the successful bidder(s) pay only the lowest (marginal) price regardless of what they were initially prepared to pay.[51]

Individuals and specified institutions categorized as retail investors by RBI can participate in the auctions on "noncompetitive" basis. Allocation to noncompetitive bidders are done at the discretion of RBI and at the weighted average price arrived at on the basis of the competitive bids accepted at the auction or any other price announced in the specific notification. The amount of securities allocated to retail investors is restricted to a maximum percentage of the aggregate amount of the issue.

## Types of Securities Issued by Government

The types of securities issued by the government are:

- *Fixed coupon securities* which carry a specific coupon rate remaining fixed during the term

[50] The issuer obtains the maximum price that each participant is willing to pay.
[51] The World Bank (2001) "Developing Government Bond Markets: A Handbook" page 155.

of the security which may be issued at a discount, at par or at premium to the face value but redeemed at par;

- *Floating Rate Bonds* which carry a coupon rate consisting of a variable base, usually the weighted average yield of 364 day T-bills, and a spread which is decided at the auction;
- *Zero Coupon Bonds* which are issued a discount and redeemed at par and the RBI determines the cutoff price at which tenders are accepted at the auction;
- *Securities with Embedded Options* which are securities with a "call" or "put" option specified and repaid any time at the option before the specified redemption date; and
- *Treasury Bills* which are short-term instruments issued by the central government currently either 91-days or 364-days maturity and sold through an auction process announced by RBI at a discount to its face value.

## Syndications and Underwriting of Government Securities

In many countries, government debt market participants may consist of only a few institutions. The paltry number of institutions participating in the market may be too limited for a government to run an auction.[52] Under such circumstances, the government may try to achieve an effective bond sale by appointing a group of institutions which for a negotiated fee will subscribe to its bond issue, and then sell the bonds to other retail or institutional investors. This type of sales mechanism is known as syndication.

Syndication is useful when the demand for government securities is uncertain. Syndicating debt securities can minimize government bond placement risk and be valuable when the government is trying to launch a new debt instrument. However, syndications need supporting arrangements to introduce them into the market. Syndication can also have disadvantages in terms of transparency. For example, the primary disadvantage associated with syndication is that it involves a negotiation regarding price and fees between the government and the various institutions willing to participate. In contrast, auctions do not involve negotiation and as a result, are more transparent.

An alternative government securities issuance method that state governments can use under conditions of uncertain demand is underwriting. In an underwriting arrangement, the government establishes a minimum price at which the underwriter, for a commission, subscribes to the entire issue.[53] Since a commission is charged, state government officials have to determine whether the underwriting is worth the price. At relatively early stages of state government debt market development, syndication and underwriting can be suitable ways to ensure the successful issuance of government securities. However, these forms of issuance are normally phased out as the market develops and the demand for bonds becomes more stable.[54]

## State Government Market Borrowings

The states have the option of raising any part of their allocation for market borrowing through

[52] A small number of institutions participating in an auction may prompt collusion. Or, the institutions may not participate at all, leading to an undersubscription of the bond.
[53] The World Bank (2001) "Developing Government Bond Markets: A Handbook" page 163.
[54] Ibid. Page 163.

auctions. However, most of the states currently raise resources through tap issuances. The share of the auction route fell from 13-15 percent during 2000-02 successively to about 2 percent in 2004-05 (Table 1A.3).

### Table 1A.3: State Market Borrowing, 2000-01 to 2006-07

| | *INR Crores* | | |
|---|---|---|---|
| | **By Tap** | **By Auction** | **Total** |
| 2000-01 | 11,630 | 1,670 | 13,300 |
| 2001-02 | 15,942 | 2,765 | 18,707 |
| 2002-03 | 27,880 | 2,973 | 30,853 |
| 2003-04 | 47,626 | 2,895 | 50,521 |
| 2004-05 | 38,217 | 885 | 39,102 |
| 2005-06 | 11,186 | 10,543 | 21,729 |
| 2006-07 (up to 17 November) | 0 | 11,026 | 11,026 |
| | *Percentage Share* | | |
| 2000-01 | 87.4 | 12.6 | 100.0 |
| 2001-02 | 85.2 | 14.8 | 100.0 |
| 2002-03 | 90.4 | 9.6 | 100.0 |
| 2003-04 | 94.3 | 5.7 | 100.0 |
| 2004-05 | 97.7 | 2.3 | 100.0 |
| 2005-06 | 51.5 | 48.5 | 100.0 |
| 2006-07 (up to 17 November) | 0 | 100.0 | 100.0 |

Source: RBI Annual Reports and Study of State Budgets.

For tap issuances, the coupon rate remains the same for all states who are pooled together in the tap issue. In the auction system, the spread between the cutoff yield and the yield on GoI securities of similar maturity varied between 48 basis points to 93 basis points during 2003-04 and 2004-05. In 2003-04, about 94 percent of total market borrowings and in 2004-05 almost 98 percent were raised through tap issues. In 2004-05 only three states (Kerala, Tamil Nadu and West Bengal) went in for some amount of market borrowings through auctions.

Investor response in 2004-05 to tap issuances was lukewarm closing short of target except in two cases despite liquidity in the system. Also, the spread widened during the 2004-05 auctions. In 2005-06, the states were encouraged to access markets through the auction route following the implementation of the Twelfth Finance Commission. As a result, the situation dramatically changed as 48.5 percent of borrowings were through auctions against 2.3 percent in 2004-05.

However, the market borrowings during 2005-06 were much lower than the previous year due to the end of "debt swap scheme" in 2004-05 and the buildup of surplus cash balances with the states. Twenty-four states opted for the auction route in 2005-06 against just three states in 2004-05. The spreads of cutoff yields for auctions were lower at 20-50 basis points vis-à-vis tap issues which were at 50 basis points. In 2006-07 so far up to 17 November, 20 state governments raised INR 11026 crores exclusively through the auction route. The spreads ranged 22-47 basis points for all except two of the 20 states.

## Secondary Market Operations for Government Securities

Secondary market trades in government securities are usually negotiated between market participants such as banks, FIs, PDs and mutual funds either directly between counter parties or negotiated through brokers. Negotiated Dealing System (NDS) of RBI provides an electronic platform for negotiating trades in government securities. Trades are also executed on the electronic platform of the Wholesale Debt Market (WDM) segment of the National Stock Exchange (NSE).

## SGL Accounts

Subsidiary General Ledger (SGL) account is a facility provided by the RBI to large banks and financial institutions to maintain records of investment in government securities and T-bills in an electronic book entry form. These entities can settle their trades in securities held in SGL through DvP mechanism, which ensures simultaneous movement of funds and securities. The Public Debt Office (PDO) within the RBI which oversees the settlement of transactions through the SGL, transfers securities from one participant to another and transfer of funds are affected by crediting/debiting the current account of the seller/buyer maintained with the RBI.

Investors who do not have an SGL facility are allowed to open a constituent SGL account with any entity authorized by RBI for the purpose and these client accounts are called as "constituent SGL" (CSGL) accounts or SGL II accounts. Through a CSGL account an entity can participate in the primary and secondary markets for government securities. All entities regulated by the RBI such as FIs, PDs, cooperative banks, regional rural banks (RRBs), local area banks, and NBFCs should necessarily hold their investments in either SGL or CSGL account.

## Negotiated Dealing System

Negotiated Dealing System (NDS) is an electronic platform providing the facility for dealing in government securities and money market instruments. NDS interfaces with the Clearing Corporation of India Ltd. (CCIL) for settlement of government securities trading for both outright and repo transactions.

CCIL was established in April 2001 to support clearing and settlement of trades in trades in government securities (as well as in forex and money markets). CCIL acts as a central counterparty for clearing and settlement of government securities transactions done on the NDS and provides guaranteed settlement of trades in government securities including repos through improved risk management practices.[55] Only a bank, FI, PD, mutual fund or a statutory corporation or a corporate that is a member of NDS and has opened an SGL account and a current account with RBI can become a member of CCIL. Members pay a onetime membership fee of INR 1 lakh. In addition, members have to pay fees and charges levied for different services offered by CCIL.

## Order Matching System

The RBI has introduced recently (in August 2005) the NDS-Order Matching System which is an electronic order matching system purely order driven with all orders from market participants being matched based on strict price/time priority. This is anonymous in the sense that the identity of parties is not revealed at the time of order entry. This also allows straight-through processing (STP), that is, a seamless integration of the various parts of the trading process starting from displaying pretrade information and ending with settlement and risk management. In addition, the system allows the trader to set his preference to enter his orders either on the basis of price or time.

## Wholesale Debt Market of National Stock Exchange

National Stock Exchange (NSE)'s Wholesale Debt Market (WDM) offers a fully automated screen-

[55] NDS risk management practices include daily mark-to-market margin and maintenance of the settlement guarantee fund.

based trading platform through the National Stock Exchange for Automated Trading (NEAT) system. This permits only high value transactions in debt securities meant primarily for banks, and institutional and corporate entities. Government securities, T-bills, PSU bonds, corporate debentures, CPs, CDs, etc., are available for trading in the segment of WDM of the NSE. The trades on the WDM segment could be either outright trades or repo transactions with settlement cycle of T+2 and repo periods (1 to 14 days).

## Secondary Market Turnover

The aggregate turnover in government securities (central and state government dated securities and T-bills) touched INR 29,55,263 crores in 2004-05 of which INR 21,05,646 crores (71.3 percent) passed through RBI SGL account and the rest through WDM segment of NSE. This includes both outright and repo transactions. The turnover through nonrepo transactions was INR 21,10,192 crores. Of this, central government securities accounted for 79.5 percent, T-bills for 18.8 percent and state government securities only 1.8 percent. The total nonrepo secondary market transactions and its share among central government dated securities, T-bills and state government securities from 1995-96 to 2004-05 are presented in Table 1A.4.

However, repo transactions have progressively overtaken the outright transactions in government securities market. From about 53 percent of total transactions in April-June 2005, the share of repo transactions have moved up to 77 percent in April-June 2006 and further up to 84 percent in July 2006 (Table 1A.5).

In both outright transactions and repo transactions, the share of state government securities in total government securities remains very low at just about 2 percent.

## Improvement of Secondary Market Liquidity in State Government Securities

The improvement of the secondary market for state government securities is very crucial in the context of the proposed access to markets by state government on their own. The issue of poor secondary market liquidity in state government securities has been addressed by the Working Group on Liquidity of State Government Securities (Chairman: Mr. V.K. Sharma) set up by the Reserve Bank of India. The Group has made the following short-run and medium-term measures to activate secondary market in state government securities.

## Short-run Measures

- Consolidation of securities by reissue of existing securities.
- Primary dealers should provide two-way quotes for state government bonds.
- Retailing of state bonds to develop wider investor base.
- Market borrowing with a minimum size of INR 1000 crores per tranche.
- Short-sale and reserved allotment at cutoff price/yield to encourage retailing and market making.
- Extension of noncompetitive bidding facility that already exists for central government securities to the state securities in the primary auctions.
- Alignment of tax structure and incentives on small savings with state government bonds to encourage retail investment in these securities.

## Table 1A.4: Nonrepo Secondary Market Transactions in Government Securities

| | SGL Nonrepo Transaction(s) (INR Crores) | | | | WDM Nonrepo Transaction(s) (INR Crores) | | | | Total Nonrepo Secondary Market Transactions (INR Crores) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Central Govt. Securities | T-bills | State Govt. Securities | Total | Central Govt. Securities | T-bills | State Govt. Securities | Total | Central Govt. Securities | T-bills | State Govt. Securities | Total |
| 1995-96 | 17,553 | 11,513 | 464 | 29,530 | 6,813 | 2,255 | 176 | 9,244 | 24,366 | 13,768 | 640 | 38,774 |
| 1999-00 | 4,05,285 | 47,575 | 3,631 | 4,56,491 | 2,78,866 | 10,644 | 2,082 | 2,91,592 | 6,84,151 | 58,219 | 5,713 | 7,48,083 |
| 2000-01 | 5,09,113 | 60,062 | 2,971 | 5,72,146 | 3,88,097 | 23,144 | 1,255 | 4,12,496 | 8,97,210 | 83,206 | 4,226 | 9,84,642 |
| 2001-02 | 11,38,504 | 67,332 | 6,131 | 12,11,967 | 9,00,100 | 25,483 | 1,412 | 9,26,995 | 20,38,604 | 92,815 | 7,543 | 21,38,962 |
| 2002-03 | 13,06,153 | 76,784 | 9,446 | 13,92,383 | 9,96,582 | 31,399 | 2,568 | 10,30,549 | 23,02,735 | 1,08,183 | 12,014 | 24,22,932 |
| 2003-04 | 15,64,112 | 1,20,056 | 17,196 | 17,01,364 | 12,13,839 | 55,597 | 4,683 | 12,74,119 | 27,77,951 | 1,75,663 | 21,879 | 29,75,483 |
| 2004-05 | 9,61,151 | 2,71,131 | 28,584 | 12,60,866 | 7,15,712 | 1,24,660 | 8,954 | 8,49,326 | 16,76,863 | 3,95,791 | 37,538 | 21,10,192 |
| | SGL Nonrepo Transactions (% to Total) | | | | WDM Nonrepo Transactions (% to Total) | | | | Total Nonrepo Secondary Market Transactions (% to Total) | | | |
| | Central Govt. Securities | T-bills | State Govt. Securities | Total | Central Govt. Securities | T-bills | State Govt. Securities | Total | Central Govt. Securities | T-bills | State Govt. Securities | Total |
| 1995-96 | 59.44 | 38.99 | 1 57 | 100.00 | 73.70 | 24 39 | 1.90 | 100.00 | 62.84 | 36 51 | 1.65 | 100.00 |
| 1999-00 | 88.78 | 10.42 | 0.08 | 100.00 | 95.64 | 3.65 | 0.71 | 100.00 | 91.45 | 7.78 | 0.76 | 100.00 |
| 2000-01 | 88.98 | 10.50 | 0 52 | 100.00 | 94.09 | 5.61 | 0 3 | 100.00 | 91.12 | 8.45 | 0.43 | 100.00 |
| 2001-02 | 93.94 | 5.56 | 0 51 | 100.00 | 97.10 | 2.75 | 0.15 | 100.00 | 95 31 | 4 34 | 0.35 | 100.00 |
| 2002-03 | 93.81 | 5.51 | 0.68 | 100.00 | 96.70 | 3.05 | 0.25 | 100.00 | 95.04 | 4.46 | 0.50 | 100.00 |
| 2003-04 | 91.93 | 7.06 | 1.01 | 100.00 | 95.27 | 4 36 | 0.37 | 100.00 | 93 36 | 5.90 | 0.74 | 100.00 |
| 2004-05 | 76.23 | 21.50 | 2 27 | 100.00 | 84.27 | 14.68 | 1.05 | 100.00 | 79.46 | 18.76 | 1.78 | 100.00 |

Source: NSE (2005)82

**Table 1A.5: Secondary Market Transactions in Government Securities (in Percent)**

| | Apr-June 2005 | Jul-Sep 2005 | Oct-Dec 2005 | Jan-Mar 2006 | Apr-Jun 2006 | Jul 2006 |
|---|---|---|---|---|---|---|
| *A. Outright Transaction* | | | | | | |
| 1. Central Government Securities | 70.7 | 77.4 | 76.1 | 80.1 | 78.8 | 78.1 |
| 2. Treasury Bills | 27.1 | 20.5 | 21.9 | 17.1 | 19.0 | 20 3 |
| 3. State Government Securities | 2.2 | 2.1 | 2.1 | 2.8 | 2.2 | 1.6 |
| **Total (1+2+3)** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |
| *B. Repo Transaction* | | | | | | |
| 1. Central Government Securities | 76.1 | 82.0 | 80.3 | 83.0 | 78.3 | 69.4 |
| 2. Treasury Bills | 20.3 | 16.5 | 18.3 | 12.2 | 19.2 | 28.4 |
| 3. State Government Securities | 3.6 | 1.5 | 1 3 | 4.8 | 2.5 | 2 2 |
| **Total (1+2+3)** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** | **100.0** |
| ***C. Grand Total (A+B) (INR Crores)*** | **6,17,535** | **7,06,835** | **6,27,605** | **6,28,424** | **8,11,229** | **2,86,293** |
| **A as % of C** | **47.2** | **36.7** | **29.1** | **23.5** | **22.6** | **15.6** |
| **B as % of C** | **52.8** | **63.3** | **70.9** | **76.5** | **77.4** | **84.4** |

Source: RBI Annual Report 2005-06.

## Medium-term Measures

- The states to seek credit rating to bring in greater transparency and attract wider base of investors.
- Use of over-the-counter (OTC derivatives) with state government securities as the underlying assets and permitting state bonds as eligible securities for delivery under the bond futures.
- Introduction of liquidity adjustment facility (LAF) repos using state government bonds.
- Use of State bonds as collateral for the provision of intraday liquidity under the real-time gross settlement (RTGS) system.
- Setting up of a special purpose vehicle (SPV) to issue SPV securities backed by GoI guarantee for consolidation of outstanding state government securities.

The Reserve Bank of India implemented two of the above measures in its Annual Policy Statement 2006-07:

- Extension of facility of noncompetitive bidding to primary auctions of state government bonds; and
- Purchase and resale of state government bonds under the LAF repo operations.

## Annexure 2:
# Strategic Benchmarks on State Debt

Strategic benchmarks, with respect to a state government's debt portfolio, represent the desired structure or composition of a liability portfolio in terms of its characteristics such as interest rate mix and overall maturity. State-level strategic benchmarks force the government to evaluate its risk tolerance and to clarify its preference in light of potentially conflicting objectives regarding market, refinancing and liquidity risk, and expected borrowing costs.[56] However, strategic benchmarks can be counterproductive if they are not adequately specified or applied.

The state government should establish benchmarks for managing its portfolio. A strategic benchmark represents the portfolio structure that the state government would prefer to have for its debt portfolio. The benchmark generally reflects the state governments' preference as to the trade-off between expected risk and reward. Wheeler (2004) indicates that strategic benchmarks for governments generally are expressed as minimum or maximum levels of acceptable risk exposure, such as:[57]

- Acceptable interest rate risk for the overall debt portfolio;[58] and
- The debt maturity profile or the acceptable level of refinancing risk for the portfolio.[59]

Strategic benchmarks are based on optimizing asset and liability management. The aim of strategic benchmarks is to lower the long term cost of state borrowing and minimize risks. Strategic benchmarks also should define:

- The currency configuration of debt;
- The share of domestic and foreign currency debt;
- The share of fixed and floating interest debt; and
- The maturity profile.[60]

It is possible to develop state government debt benchmarks that can reduce the government's balance sheet risk by taking into account the characteristics of the primary cash flows (e.g., tax revenues) that are available to it for servicing the government's debt.

### Debt-stress Policy Variables

Under the current medium term fiscal reform program (MTFRP), a state debt to GSDP ratio of thirty (30%) percent and a state debt to total revenue receipt ratio of three hundred (300%) percent is being used as a benchmark for state debt. In the case of special category states, state debt to total revenue receipts should not exceed two hundred (200%) percent. In addition, a state fiscal deficit of three (3%) percent of GSDP has been prescribed as a medium-term goal for structural adjustment guidelines.

On acceptance of the recommendations of the TFC and putting in place a Debt Consolidation

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[56] Please see Annexure7: Minnesota State Debt Policy on how a U.S. state government establishes its benchmark criteria.
[57] Wheeler (2004) Pg 112.
[58] This type of target is based on a multitude of factors including duration of the borrowing and a desired level of interest rate structure.
[59] In the State government's debt policy manual a limit on the amount of debt maturing at any time is generally established. This limit on debt maturity includes a quantifiable ceiling of debt (maturity) expressed as a percentage of the overall portfolio.
[60] Mr. Anil Bisen, Director, Planning Commission, New Delhi, "Presentation for REFORM Debt Management Workshop," Bangalore, Karnataka, September 26, 2006.

and Relief Facility, Ministry of Finance set a benchmark of debt sustainability of a State at interest payment as percentage revenue receipts at 20 percent (October 2005).

For measuring the excessive *stock* of debt, the Ministry of Finance, Government of India, measures indebtedness on the basis of several criteria, including:

- Debt to GSDP Ratio
  - Benchmark: Greater than or equal to 30 percent is poor or weak.
- Debt to Total Revenue Receipts
  - Benchmark: Greater than or equal to 300 percent for states indicate a poor debt condition. Greater than or equal to 200 percent for special category states is poor or weak.

**Under the current medium term fiscal reform program (MTFRP) a state debt to GSDP ratio of thirty (30%) percent and a state debt to total revenue receipt ratio of three hundred (300%) percent is being used as a benchmark for state debt. In the case of special category states, state debt to total revenue receipts should not exceed two hundred (200%) percent. In addition, a state fiscal deficit of three (3%) percent of GSDP has been prescribed as a medium-term goal for structural adjustment guidelines.**

- Ratio of Interest Payments to Total Revenue Receipts
  - Benchmark: If interest as a percent of total revenues is greater than or equal to 18 percent, it is an indication of a weak or poor financial position.

For measuring the excessive stock of debt, the Ministry of Finance, Government of India measures the excessive *flow* of debt on the basis of the following criteria:

- Fiscal Deficit to Total Revenue Receipts
  - Benchmark: Fiscal Deficit as a percentage of total revenue, if greater than 25 percent indicates poor or weak position.
- Revenue Deficit as a percent of Fiscal Deficit
  - Benchmark: If the revenue deficit as a percent of the fiscal deficit is greater than or equal to 50 percent, it is an indication of a poor or weak financial position.
- Rate of Growth of Debt to the Rate of Growth of Revenue
  - Benchmark: If the rate of growth of debt to the rate of growth of revenue is greater than or equal to 1.25, it is an indication of a poor or weak financial position.

## Assessing the Fiscal Risk of State Government Guarantees

In 2003, the Ministry of Finance, Government of India, the Reserve Bank of India, and representatives of selected states met in a Panel to review State-level off-balance (contingent) liabilities problem. The Panel examined the rising trend in outstanding guarantees of state governments and recognized the importance of classifying guarantees and the escalating likelihood of default associated with those off-balance guarantees.

The Panel came to the conclusion that historic default data would not be an effective predictor of future default probabilities (for current state guarantees). As a result, the Panel suggested two methodologies for assessing fiscal risk off-budget guarantees, including:

1. **Full Value on the Budget:** Under this methodology, guarantees and the risk associated with these guarantees are assessed at one-hundred (100%) percent. In other words, off-balance sheet contingent liabilities would be equivalent to actual debt in state government reporting (and, risk provision).
2. **Partial Value on the Budget:** The Panel also recommended for consideration the classification of projects (or other activities) in terms of a risk weighting classification scheme. Projects would be classified as high, medium, low, and very low risk and be assigned an appropriate risk weight. The Panel suggested that State governments could use the assistance of Credit rating agencies to assess the associated project risk (sans guarantee). The rating, sans guarantee, could then be used for the purpose of classifying the guarantees into high, medium, low and very low risk. States would then have to use their best judgment to assign a risk probability to each category (e.g., 5 percent for very low risk, 25 percent for low risk, 50 percent for medium risk, and 75 percent for high risk).[61] Risk probabilities could then be applied to the underlying contingent guarantees to estimate the state's obligations. This could then be added to the annual debt service obligation to arrive at the annual fiscal burden of total state debt and contingent liabilities.

The Eleventh (11$^{th}$) Finance Commission concluded that states should aim to limit interest payments to 18 percent of revenue receipts. A modified recommendation proposed by the State Finance Secretaries Panel was to integrate the risk-adjusted contingent liabilities so that total state obligations did not exceed 20 percent of their revenue receipts.[62] The State Finance Secretaries Panel also recommended that states publish data regarding guarantees regularly (in a specified format attached to the State Budget documents).

## Benchmarks and State Policy Objectives

State government strategic benchmarks should reflect the government's debt management philosophy and debt management goals and the state's policy objectives. Incorporating the state's policy objectives and economic plan under one umbrella enables policies to be mutually reinforcing and reduces the risk of policy tensions. By way of example, a state government with a fiscal deficit and a high public sector debt to GSDP ratio may be anxious to reduce the volatility cost of its debt servicing and may prefer to have a high proportion of long-term (duration) fixed term debt. Whereas, another state government with the same financial conditions may seek to lower debt servicing costs by financing at short maturities and taking the risk that the rolled over debt is not more expensive. Some strategic sovereign benchmarks are listed in Table 2A.1.

## Implementing Strategic Benchmarks

Once the strategic benchmarks are in place, the state government's debt manager must

[61] GoI State Finance Secretaries Panel (2003) Mimeograph "Assess Fiscal Risk of State Government Guarantees" Pg. II.
[62] Ibid.

**Table 2A.1: Strategic Benchmarks Country Examples[63]**

| Country | % of Domestic to Foreign Currency | % of Fixed to Floating | Refinancing/Maturity Guidelines |
|---|---|---|---|
| Belgium | 98.2:100 | – | 10-15% on debt maturing in next year; smooth redemption profile, weighted average maturity, 6.2+/- 0.1 years |
| Columbia | 67:33 | 70:30 | 15% in 12 months, 30% in 36 months |
| France | 100 | 10% in inflation indexed debt | Average maturity of 5.5 years |
| Portugal | 100 | 68:22 | 20% in 12 months, 35% in 24 months, 45% in 35 months |
| Sweden | 73:27 | – | 25% in 12 months |

endeavor to move the state's risk characteristics of the actual portfolio to those embodied in the strategic benchmark portfolio. In doing so, the debt manager must follow the guidelines and procedures laid out in the state's debt policy manual. Transactions to rebalance the portfolio generally result in some transactions costs. In devising the strategic benchmarks, it is important to also provide a range for the elements in the benchmarks in order to avoid incurring excessive transaction costs for what may be relatively small differences in risk.

[63] Mr. Anil Bisen, Director, Planning Commission, New Delhi, "Presentation for REFORM Debt Management Workshop," Bangalore, Karnataka, September 26, 2006.

## Annexure 3:

# Bank for International Settlements (BIS) Definition of Liquidity[64]

Liquid markets are defined as ones where participants can rapidly execute large transactions without having a significant impact on price. This feature enhances market participants' confidence in the function of these markets both in normal and stress conditions. (BIS, 1999). The concept of liquidity can be further elaborated in a number of dimensions, including:

- **Tightness** or how far transaction prices diverge from mid-market prices. This can be measured by the bid-ask spread. The tighter the spread, the higher the liquidity and less cost for the buyer or seller;
- **Depth** denoting either the volume of trades possible without affecting prevailing market prices or the amount of orders on the order books of market makers at a given time;
- **Resiliency** referring to the speed with which price fluctuations resulting from trades are dissipated, or the speed with which imbalances in order flows are adjusted; and
- **Immediacy** referring to the time that passes between the placing of a market order and its execution.[65]

Market liquidity has many dimensions, and depends *inter alia*, on the volume and design of the relevant asset. Government bond markets have advantages in this regard as typically government security issues are largely compared with other bond issues. There is some evidence that larger issue sizes tends to be accompanied by narrower bid-ask spreads. Furthermore, as a general rule, government securities are more homogenous because there is only one issuer (the government) and because other features, such as coupon payment dates and issuance frequency are usually identical across issues. This implies a high substitutability among the various issues. The desire to increase market liquidity is the rationale for the trend by managers of public debt towards passive issuance policy — that is the regular issuance of bonds within a limited set of maturities and in relatively large sizes.

[64] This section draws largely from Bank for International Settlements (1999).
[65] See Upper (2001).

**Annexure 4:**

# Types of Securities

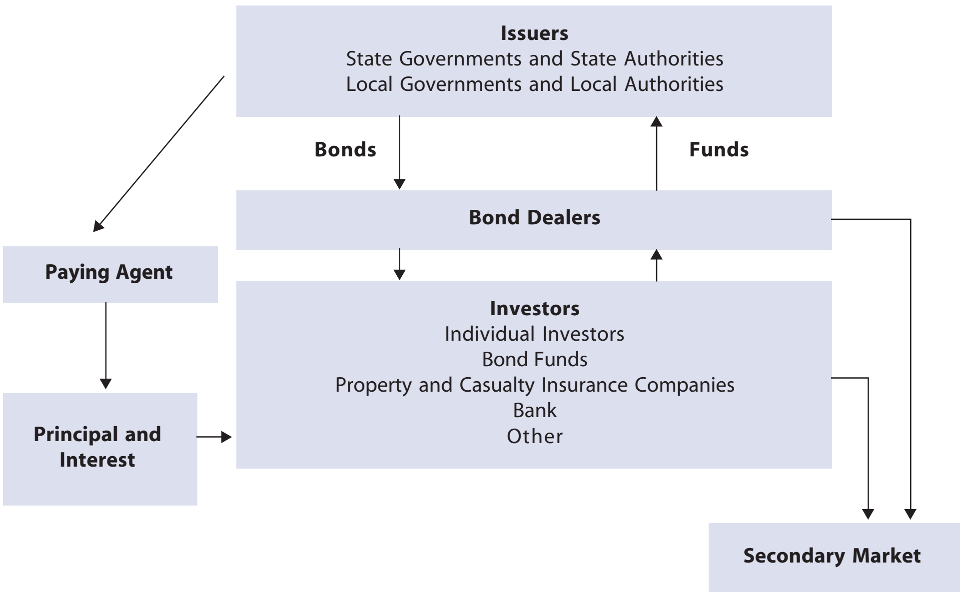
After the discussions on the current system of subsovereign market borrowing and to the mechanics of trading of government securities in India, this Part would go into the discussion of the various types of bonds that generally exist in the financial market for borrowing by the subnational governments. However, we need to keep in mind that all types of fixed income securities which are often traded in well developed capital markets may not be relevant in Indian scenario.

## The State Bond Market

The bond market consists of the primary market, which deals in the issue of new securities, and the secondary market, where securities are traded after they have been issued. Figure 4A.1 presents the flow of funds through the primary market. The process generally begins when the issuer (i.e., the state government) sees a need for money to pay for capital investments or to fill gaps in cash flow. The issuer then takes a series of steps that lead to the primary market. At this point, the bond dealer (which may be independent or part of a securities firm or a bank) purchases the issuer's bonds through a process called underwriting.

The bonds are (in many instances) resold to institutional and individual investors, who pay the dealer directly for the debt that they have purchased. The dealer (or underwriter) generally uses these funds to reimburse itself for its capital that was used to purchase the bond from the issuer. If a dealer is an underwriter, and there is no buyer, or inadequate buyer participation, then the underwriter assumes the risk of holding the bonds in inventory until they are eventually sold. Both principal and interest are paid to the investors by the issuer. Payment of principal and interest to the investor usually takes place on a fixed schedule through a bank acting as a payment agent.

**Figure 4A.1: Flow of Funds in the Primary Market**




Source: The Bond Market Association (2003).

The secondary market consists of activity and trading in securities after they have been sold as new issues. This market also supports the primary market by providing liquidity to investors who are more likely to buy a security if they know they can sell that security at a fair market price prior to its stated maturity.

## Rationale for Use of Bonds

State governments generally finance capital project requirements using three options: paying for projects with cash, borrowing for projects and repaying the resulting debt over time, and leasing facilities. Both long-term debt financing and lease rental agreements require states or their independent authorities to enter the bond market.

Using cash requires the appropriation of either lump sum amounts, usually for smaller projects, or a series of lump sum payments as larger facilities are built over several years. In recent years, some (state) jurisdictions have earmarked continuing revenue flows such as lottery proceeds for current funding of capital construction. An advantage of using cash is that it may cost less, since there are no interest or debt issuance costs. A disadvantage is that adverse fiscal conditions or competing spending priorities can result in insufficient revenues to fund projects. If state revenues run low, new capital projects may be delayed or dropped. Alternatively, using cash could require a tax increase to fund government financing requirements.[66]

If current revenues cannot support state capital spending needs, states may choose bonding to finance projects. Long-term borrowing for capital construction has several advantages:

- Costs can be spread over the useful life of projects with future users of projects sharing those costs;
- Citizens can derive near-term benefits from capital expenditures;
- Higher taxes to provide necessary capital facilities may be avoided;[67] and
- Costs may be reduced in period of high inflation when the interest paid on debt is less than the increased construction costs from waiting to finance projects with cash.

There can be disadvantages to the use of long-term financing, including:

- Debt repayment commits the state to many years of fixed costs (debt plus interest repayments);
- Bonding can fund lower-priority projects that may not be approved using cash (budget) financing; and
- Excessive bonding can affect state credit ratings which could increase interest costs on future bond issues.

The widespread use of bonding by state governments suggests that the advantages outweigh the disadvantages.

## States can Lease Facilities

Finally, States can lease facilities. The most common leasing arrangement, the lease purchase agreement, has elements of traditional long-term

[66] Increasing state taxes is usually politically difficult.
[67] Higher taxes may be avoided in the near term. However, some state governments increase some state-level taxes in order to service the bonded debt repayment.

debt financing. Under lease-purchase agreements, states usually contract with state building authorities to construct facilities. Those authorities sell bonds to finance the construction and then lease the facilities back to the states, which pay rent for the facility operations, maintenance, and debt service costs. Often, states acquire title to the facilities once the bonds have been retired by the building authorities.

Lease purchase agreements permit states to finance capital construction projects without affecting their debt limits, since independent authorities have title to the property and all debt service payments are accounted for as routine operating expenditures, such as rental payments. Lease purchase agreements, like long-term debt financing, spread the costs of the facilities over their useful life. A disadvantage of the approach is that lease-purchase financing generally carries higher interest rates than general obligation bonds issued by the state.

## Annexure 5:
# Credit Enhancements

Credit enhancement is a term denoting the credit of a stronger, more highly rated entity, that can be used to strengthen or enhance the credit or a lower rated entity. The nature and type of credit enhancements has grown substantially over the past two decades for many reasons, including:

- Investor concerns about the credit quality underlying issuers;
- Increasingly complex security features;
- Use in the short-term market; and
- Cost efficiency in the pricing of insurance.

A bond is said to be unenhanced if it carries only its own rating and not that of a private or public insurance. Various forms of enhancing state bond (debt) issues are briefly discussed in the sections below.

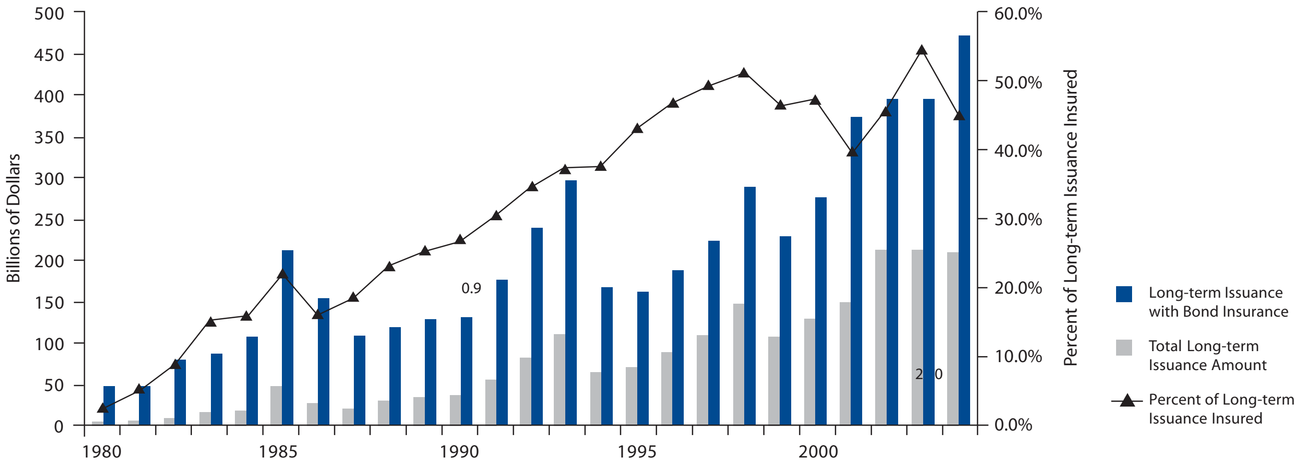
### Bond Insurance

Bond insurance is a legal commitment by an insurance company to make payments of principal and interest on debt in the event that the issuer is unable to make those payments on time. Generally, such payments will be made as originally scheduled and the principal will not be accelerated.[68] Bond insurance generally covers the full maturity range of the bonds. The role of bond insurance in the market is:

- To reduce interest costs to issuers;
- To provide a high level of comfort (security) to investors; and
- To furnish improved secondary market liquidity and price support.

There has been tremendous growth, for example, in the use of bond insurance in the U.S. Figure 5A.1 illustrates this trend. Bond insurance

**Figure 5A.1: Bond Insurance as a Percentage of the Long-term New Issues Market in the U.S. (1980-04)**




Source: Thomson Financial Securities and Association of Financial Guaranty Insurers (Various Years).

[68] Principal will not be paid earlier than its scheduled maturity date.

has grown from 2.5 percent of the USD 46.3 billion new-issue long market in 1980, to more than 46 percent of the USD 464 billion new-issue long market in 2004. In the earliest years of municipal (state) bond insurance, most of the newly insured issues were general obligation bonds, whereas now most insured issues are revenue bonds. In 2000, four major bond insurers in the United States accounted for 97 percent of the new-issue insured market. Bonds traded in the secondary market, unit investment trusts and private portfolios can also be insured. The two major insurers of bonds in the United States are the Municipal Bond Investors Assurance Corporation (MBIA Corporation) and the Ambac Financial Group (AMBAC).

Although bond insurance provides significant additional security to the investor, the issuers are the first source for payment of principal and interest on the bonds. For that reason, not all insured bonds carry identical prices and yields.[69]

## Partial Risk Guarantees

Partial guarantees assure payment of debt service to lenders up to a specified level, thus addressing long-term credit risk concerns. Partial guarantees can help lenders better manage their balance sheets and funding operations and therefore aim at facilitating the participation of local investors. Partial guarantees can also be specifically targeted to institutional investors [e.g. pension funds, insurance funds] who can provide extended maturities, but may not be willing to do so in specific projects without a risk reducing guarantee. Two examples of policy risks enhancement mechanisms include IBRD Partial Risk Guarantee (PRG) Facility and MIGA Political Risk Insurance (PRI).

## IBRD Partial Risk Guarantee (PRG) Facility

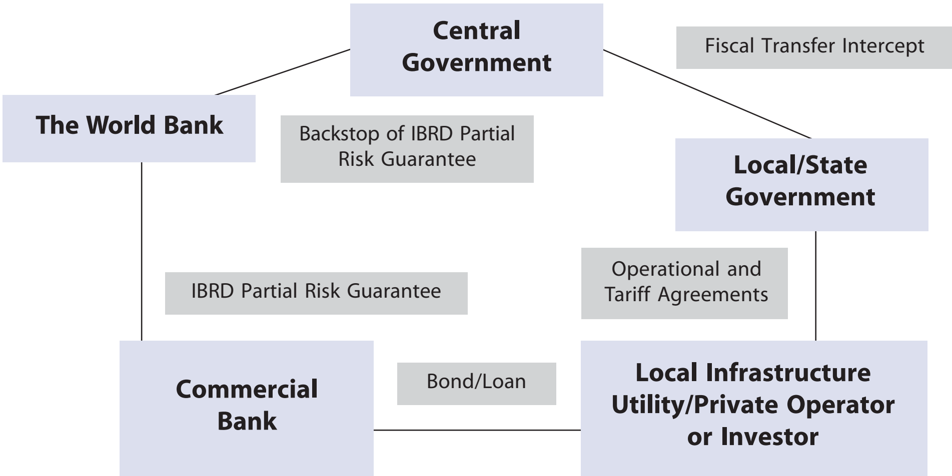
This facility covers transactions with subsovereign (state, local) governments with a relatively high risk profile. Governments can establish a partial risk guarantee mechanism in the event of a state government breach of contract risk. The IBRD Partial Risk Guarantee Facility is described in Figure 5A.2. In the example provided below, the infrastructure corporation issues a bond, or contracts a loan with a private lender, to finance the investment. The private investor is generally concerned about the sustainability of the project, the ability to sustain cost-recovery tariffs, and the ability of state (local) governments to maintain their agreements.

Under the facility, the IBRD would provide a partial risk guarantee against the breach of tariff policy agreement by the state authority. For example, if the contract is breached because the government administration called for a general reduction in tariffs, the investor may not be able to repay the bond or loan. In this event, the guarantee would be called, and the IBRD would make payment under the guarantee and then exercise a counter-guarantee with the central government. A partial risk guarantee mechanism has several advantages, including:

- It provides better financing terms through spread reduction and maturity extension; and
- Incremental public debt is leveraged.

[69] Other technical and tax-related considerations play a role in differentiating bond price and yield.

**Figure 5A.2: The Partial Risk Guarantee Facility**




## MIGA Political Risk Insurance (PRI) Facility

This facility is used to cover transactions with intermediate policy risk, including coverage against local/state government breach of contract risk. The objective of the MIGA facility would be to cover investors in a range of risks including: war, civil disturbance, expropriation, and transfer restrictions include inconvertibility, and breach of contract at the subsovereign level.[70]

The MIGA risk facility would generally apply in the case of equity investments, contracts and many non-shareholder loans. Such coverage is also available for management contracts and other cross-border investments.[71] In addition, MIGA coverage may also be provided if the project is supported by a subsidy scheme. In this case, the investor(s) may want to cover their risk against any breach by the government in providing the subsidy funding.

## Letter of Credit

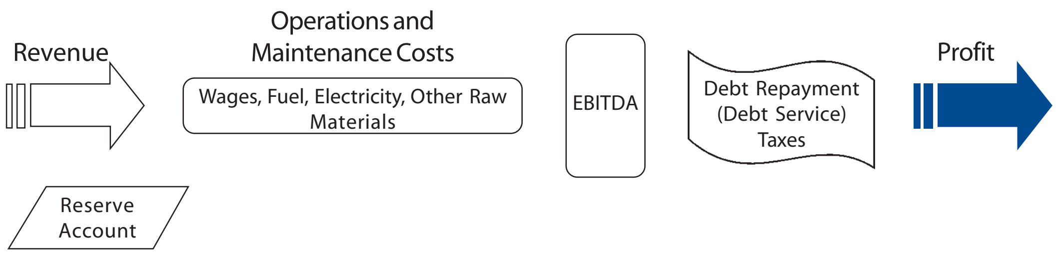
Bank letters and bank lines of credit are other forms of credit enhancement. Bank letters of credit are typically written for a much shorter term than bond insurance. A letter of credit will pay the investor principal and accrued interest if an event of default has occurred. A letter of credit is generally stronger than a line of credit and has many more conditions that must be satisfied before it will pay the investor principal and interest.

## Debt Service Reserve Fund

A debt service reserve fund is a fund in which moneys are placed which may be used to pay debt service if pledged revenues are insufficient to satisfy the debt service requirements. (See Figure 5A.3: Establishing a Reserve Account). The debt service reserve fund may be entirely funded with bond proceeds, or may only be partly funded at the time of issuance and allowed to reach its full funding requirement over time. In other words, some project

[70] Noel and Brezski (2004).
[71] Ibid, p 24.

**Figure 5A.3: Establishing a Reserve Account**




revenues over time are used to fund this debt service reserve fund.

If the debt service reserve fund is used in whole, or part, to pay debt service, the issuer is usually required to replenish the funds from the first available funds or revenues. A typical reserve requirement might be the maximum aggregate annual debt service requirement for any year remaining until the bond reaches maturity. The size and investment of the reserve may be subject to regulations.

Establishing a Reserve Account may satisfy debt holders and reduce the cost of debt. The source of funds for such a reserve account may be the project's revenue or an independent third party. In either case, this increases the overall cost of the project as the funds in the reserve account could have been better invested.

**Annexure 6:**

# Government Debt Instruments and Sales Methods

| Country | Standard Instruments and Maturities | Other Instruments, Derivatives | Selling Techniques | Primary Dealers |
|---|---|---|---|---|
| Canada | Cash management bills; treasury bills; government bonds: 2, 3, 5, 10, 30 yrs | STRIPS; indexed-linked bonds; nonmarketable Canada savings bonds; interest swap program | Auctions | Yes |
| France | Treasury bills; treasury notes; fungible government bonds (OATs) – 10 years | Floating rate OATs against long- or short-term benchmark rates; inflation-indexed; Treasury is authorized to engage in interest rate swaps | Auctions, syndicate for foreign borrowing | Yes |
| Germany | Treasury discount notes 1-2 years; medium-term federal notes: 4 years, 5 years special federal notes | STRIPS | Bank syndicate and multiple price auction for long-term bonds, private placements | No, federal bond consortium |
| Japan | Treasury bills; medium-term interest bearing government bonds: 2-years; medium-term discount government notes: 5 yrs; Long-term interest bearing government bonds: 10 yrs; Super long-term interest bearing bonds: 20 years | None | Auctions: Syndicate System for 10 year bonds | No, underwriting syndicate |
| Sweden | Treasury bills; Treasury bonds less than 15 years | Index-linked bonds; nonmarketable: national savings system; National Debt Account: Swaps for foreign currency debt | Auctions | Yes |
| United Kingdom | Fixed rate gilt-edged securities; treasury bills | STRIPS, inflation-indexed instruments | Auctions; uniform price auctions for long-term and multiple price auctions for short-term instruments; automated auctions for short-, medium- and long-term instruments | Yes |
| United States | Treasury bills; Treasury notes: 2, 3, 5, 7, 10 years, and Treasury bonds | STRIPS (Notes and Bonds); inflation-indexed bonds | Mostly Auction (Multiple Priced) | Yes |

## Annexure 7:

# Minnesota State Debt Management Policy

The state sells general obligation bonds into the market place. The proceeds from the sale of the bonds are used to pay the cost of building the capital projects that are approved by the Legislature.

The state's Debt Management Policy has three goals. They are:

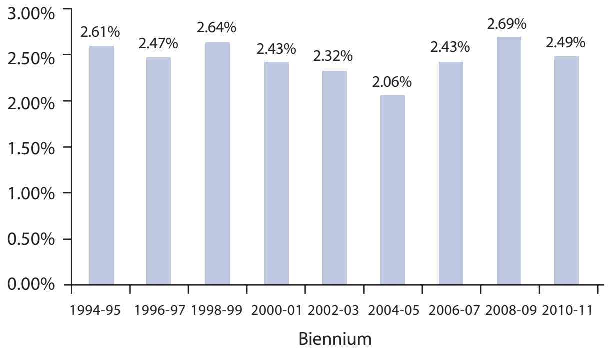
1. Maintain/Regain Aaa/AAA bond ratings;
2. Minimize state borrowing costs; and
3. Provide a reasonable financing capacity within a prudent debt limit.

The Debt Management Policy has five guidelines. They are:

1. The general fund appropriation for debt service shall not exceed 3.0 percent of nondedicated revenues (Figure 7A.1);
2. General obligation debt shall not exceed 2.5 percent of state personal income revenues (Figure 7A.2);
3. State agency debt shall not exceed 3.5 percent of state personal income revenues (Figure 7A.3);
4. The total amount of state general obligation debt, moral obligation debt, state bond guarantees, equipment capital leases, and real estate leases are not to exceed 5.0 percent of state personal income revenues (Figure 7A.4); and
5. Forty percent of general obligation debt shall be due within five years and 70 percent within 10 years revenues (Figure 7A.5).

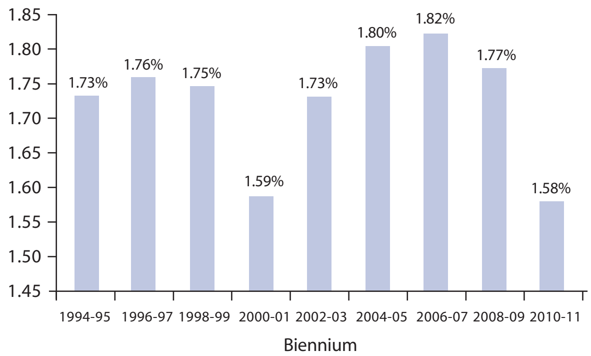
Debt Capacity Forecasts are released in February and November of each year. The Debt Capacity Forecasts are used by the Governor and

**Figure 7A.1: General Fund Appropriation for Debt Service not to Exceed 3.0% of Nondedicated Revenues**




*February 2006 Forecast*

**Figure 7A.2: General Obligation Debt not to Exceed 2.5% of State Personal Income**




*February 2006 Forecast*

**Figure 7A.3: State Agency Debt not to Exceed 3.5% of State Personal Income**

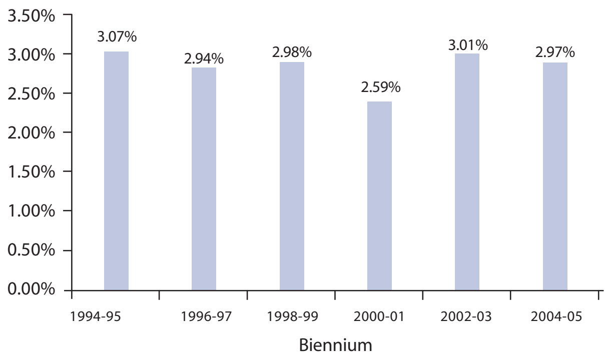


**Figure 7A.4: Total Amount of State General Obligation Debt, Moral Obligation Debt, State Bond Guarantees, Equipment Capital Leases, and Real Estate Leases not to Exceed 5.0% of State Personal Income**

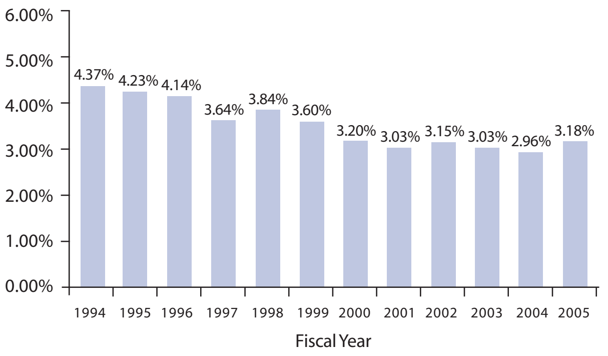
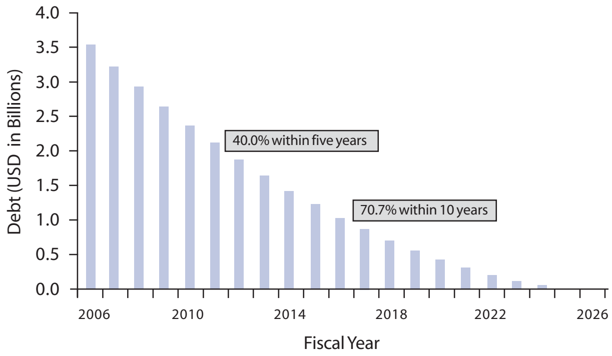



**Figure 7A.5: General Obligation Debt Estimated Outstanding June 30, 2006**




the Legislature in the capital budget process. Forecasts of the cost of debt service are also made at the same time.

The state receives credit rating on its general obligation bonds from three credit rating agencies. The state's current ratings are:

- Moody's Investors Service Aa1;
- Standard & Poor's Corporation AAA; and
- Fitch Ratings AAA.

General Obligation bonds carry the full faith and credit of the state. This means that the state has pledged to levy a statewide property tax to pay the debt service costs. Instead of levying the statewide property tax, the Legislature appropriates from the general fund and other funds an amount of money sufficient to pay the debt service on the bonds.

Article XI, Section 5, of the Minnesota Constitution states the requirement for incurring public debt (general obligation bonds). Subdivision (a) states "to acquire and to better public lands and buildings and other public improvements of a capital nature, and to provide money to be appropriated or loaned to any agency or political subdivision of the state for such purposes."

This means that the constitution requires four tests to be met:

- The project for which the bonds are to be issued must be publicly owned;
- The project must be a capital expenditure;
- The project must be a public purpose; and
- The purpose for which bonds are to be issued must be clearly set forth in the law.

What are the constitutional provisions for which bonds may be issued?

- Repel invasion or suppress insurrection;
- Borrow temporarily;
- Refund outstanding bonds of the state or any of its agencies;
- Establish and maintain highways;
- Promote forestation and prevent and abate forest fires;

- Construct, improve and operate airports and other air navigation facilities;
- Develop the state's agricultural resources by extending credit on real estate; and
- Improve and rehabilitate railroad right-of-way and other facilities whether public or private.

## Debt Capacity Forecast — February 2006

Minnesota Statute 16A.105 requires the Commissioner of Finance in February and November of each year to prepare a debt capacity forecast to be delivered to the governor and the legislature.

## Statement of Indebtedness

The state of Minnesota on February 1, 2006 had USD 3,565,445,000 of general obligation bonds outstanding. The state has no general obligation notes outstanding. The Laws of Minnesota 1991, Chapter 350, authorized the state to issue revenue bonds secured by the state's full faith and credit to finance the construction and equipping of an engine repair facility in Hibbing and an aircraft maintenance facility in Duluth. The state issued USD 47,670,000 of these revenue bonds in May 1995 of which USD 36,850,000 remains outstanding. The state's full faith and credit secures all of the bonds.

## Debt Service Costs

The debt service costs for the state's general obligation bonds are shown below. The amounts shown are the general fund costs by fiscal year and include the amount of debt service paid from the sports and health club tax. In this forecast, the assumption for future capital budgets is USD 560 million in even numbered legislative sessions and USD 135 million in odd numbered years.

| Year | Actual | Year | Forecast |
|---|---|---|---|
| 2003 | 297,640,000 | 2007 | 404,975,000 |
| 2004 | 266,947,000 | 2008 | 416,899,000 |
| 2005 | 324,568,000 | 2009 | 472,981,000 |
| 2006 | 353,728,000 | 2010 | 433,293,000 |
| | | 2011 | 476,983,000 |
| | | 2012 | 456,318,000 |
| | | 2013 | 478,429,000 |

## Debt Authorized and Unissued

The state has authorized and unissued general obligation bonds totaling USD 1,040,385,600.

## Future Debt Capacity

Future general obligation debt capacity is forecast through the 2012-13 biennium. To make this forecast, many variables must be forecasted. Following are some of the numerous variables that are part of making this forecast.

The state's debt management policy has a guideline that limits the appropriation for debt service from the general fund to 3 percent of general fund revenues. The Department of Finance revenue forecast is used for revenues in the next two biennia and is increased in future years based upon projected economic growth factors. The 3 percent limit under the guideline is then used to estimate the maximum amount of general fund revenues available for debt service.

Other variables that are considered as part of the forecast are interest rates on bonds sold, interest rates for investment earnings on balances in the debt service fund and the bond proceeds fund, various receipts coming into the debt service fund, cash flow on future capital projects, the dollar amount of bonds to be sold, and the timing of the sale of bonds.

The forecast of future debt capacity also assumes that major capital budgets will be approved in the even numbered legislative sessions and small emergency capital budgets will be approved in the odd numbered years. The assumption is that the large capital budgets are passed by the legislature in level amounts.

Based upon all these assumptions, the maximum debt capacity for capital budgets in even numbered years is USD 990,000,000 each even numbered year through 2012 and is USD 135,000,000 in each odd numbered year through 2013.

## Annexure 8:
# DIMC and CS-DRMS Implementation Road Map

The following road map is a series of logical steps that a state needs to consider in order to establish a DIMC and implement the CS-DRMS Software.

## Timing Considerations

A state should consider factors that affect the timing of the DIMC implementation. At its core, the DIMC should enhance fiscal management. A key component of fiscal management is the development of the annual budget. The Finance Department should consider the advantages of phasing in the budget-related components of the cell so that the staff could work into their new duties as the budget process unfolds.

Successful implementation could mean that DIMC members would observe and learn as much as possible by having close organizational access to the Finance Department's processes and procedures in budget development. It would be impossible to have the new DIMC staff fully trained in time to participate in a full and meaningful way in the first year's budget decision-making, but it would be advantageous for them to view the process from the vantage point of their new position in the DIMC.

As members become familiar with the process they would play a more significant role in the budget process during the next year. Moreover, being able to observe the budget presentations to the Legislature could be useful to DIMC analysts with prior finance department experience and especially helpful for the DIMC staff that come from other government and nongovernment organizations.

An aggressive approach to beginning an DIMC may be difficult. For instance, the leadership of the DIMC will be subjected to the intense time pressures that accompany any budget process and might find very little time to oversee the new organization. In addition, some of the very people who might be drawn from their current duties in other Government departments may be in positions that are critical to their department's budget development. Their departure in the short-term could leave the departments in a difficult position.

The Finance Department must consider the time pressures of the budget calendar. Accordingly, the state must be cognizant of the timing of DIMC creation in context of these important events.

## DIMC Organizational Development Steps

In connection with the desire to initiate the DIMC as expediently as possible, the REFORM team recommends these initial steps. The major categories and sub categories can be viewed as indicators of progress in implementing the road map.

### Step 1. Preimplementation Planning

- Obtain the concurrence of the key decision makers in the Department of Finance. Buy-in is critical.
- Determine conditions for the operation of the DIMC. Examples of these conditions could include requiring a term of three to five years for each posting, protecting the postings from job transfers and job rotations.
- Decide the elements to be included in the

DIMC such as the extent of including debt management in the cell.

### Step 2. Roll-out DIMC

- Issuance of a Government Order as soon as possible will establish the DIMC formally. The order should define any special conditions that accompany its creation.
- Appoint the DIMC Director.
- Finalize job descriptions and position qualifications.

### Step 3. Staffing Activities

- Develop strategies for filling positions. Examples of these strategies could be to recruit or assign people from within the Finance Department or from within state government, from public financial agencies.
- Decide strategy for filling positions such as reassignment, deputation, recruitment, and recruitment from outside state government.
- Develop a timetable for staffing the DIMC.
- Establish the vehicle for contracting staff, for use on a case-by-case basis, primarily for appointments from entities outside the Government structure.
- Find suitable candidates and create a list of candidates.
- Develop short lists and make final appointments.

### Step 4. Initiate Networks

- Identify state-based academic, institutes, professional associations that can assist in DIMC research activities.
- Officially invite organizations identified above to nominate a member to serve as a DIMC resource person.
- Determine compensation package for resource persons.

### Step 5. Initial Training

- Develop training plan for each employee.
- After collaboration with training facilities for appropriate coursework, schedule employees for training according to their needs and training plan.

### Step 6. Make Assignments for DIMC Members

- Assignments to DIMC.
- Officially appointment of resource persons.

### Step 7. Formal Government Order Issued

- Defines scope of the DIMC.
- Defines relationship to state government.
- Officially appoints the DIMC Director.
- Appoints membership positions.
- Describes reporting protocol.
- Defines study protocol.
- Allocates budget line, offices, furnishings, and equipment.

### Step 8. DIMC Operationalized

- Operationalize FPAC/DIMC with formal "kick-off" ceremony.
- Ensure regular — at least once a fiscal year — reporting to the state legislature and cabinet.

### Step 9. Hold Regular Meetings

- Establish meeting protocol regarding a quorum and venue.
- Ensure circulation of meeting agenda in

advance of meetings.

- Schedule regular meetings of DIMC members and resource persons.
- Ensure participation of Finance Secretary or his designate in meetings.
- Prepare and circulate detailed minutes with clear follow-up action.

### Step 10. Prepare Regular Reports

- Establish report format and periodicity — *e.g.*, biannual reports.
- Determine report recipients.
- Post on Web site under the *Right to Information* (RTI) legislation.

### Step 11. Publish Completed Studies

- Establish a publication format and periodicity — *e.g.*, annual reports.
- Determine circulation list, which should include — at a minimum — the Chief Minister, his cabinet, principal departmental secretaries, and all state legislators.
- Post on Web site under the *Right to Information* (RTI) legislation.

## CS-DRMS Implementation Steps

In connection with the desire to initiate the FPAC as expediently as possible, the REFORM team recommends these initial steps. The major categories and subcategories can be viewed as indicators of progress in implementing the road map.

### Step 1. Preimplementation Planning

- Obtain the concurrence of the key decision makers in the Department of Finance. Buy-in is critical.
- Determine conditions for the operation of the FPAC. Examples of these conditions could include requiring a term of three to five years for each posting, protecting the postings from job transfers and job rotations.
- Decide the elements to be included in the FPAC such as the extent of including debt management in the cell.

### Step 2. Collect Debt Data

- Issuance of a Government Order as soon as possible will establish the FPAC formally. The order should define any special conditions that accompany its creation.
- Appoint the FPAC Director.
- Finalize job descriptions and position qualifications.

### Step 3. Assemble Dataset

- Develop strategies for filling positions. Examples of these strategies could be to recruit or assign people from within the Finance Department or from within state government, from public financial agencies.
- Decide strategy for filling positions such as reassignment, deputation, recruitment, and recruitment from outside state government.
- Develop a timetable for staffing the FPAC.
- Establish the vehicle for contracting staff, for use on a case-by-case basis, primarily for appointments from entities outside the Government structure.
- Find suitable candidates and create a list of candidates.
- Develop short lists and make final

appointments.

### Step 4. Create MS Excel Database

- Identify state-based academic, institutes, professional associations that can assist in FPAC research activities.
- Officially invite organizations identified above to nominate a member to serve as a FPAC resource person.
- Determine compensation package for resource persons.

### Step 5. Initial CS-DRMS Training

- Develop training plan for each employee.
- After collaboration with training facilities for appropriate coursework, schedule employees for training according to their needs and training plan.

### Step 6. Make Assignments for DRMS Team Members

- Department assignments for Expenditure Budget Analysts.
- Assignments to DIMC.
- Assignments to Tax Analysis Wing.
- Assignments to Revenue Forecasting Wing.
- Officially appointment resource persons.

### Step 7. Migration of MS-Excel Database to CS-DRMS Database

- Defines scope of the FPAC.
- Defines relationship to state government.
- Officially appoints the FPAC Director.
- Appoints membership positions.
- Describes reporting protocol.
- Defines study protocol.
- Allocates budget line, offices, furnishings, and equipment.

### Step 8. CS-DRMS Monitoring and Quality Control Visit

- Operationalize FPAC/DIMC with formal "kick-off" ceremony.
- Ensure regular — at least once a fiscal year — reporting to the state legislature and cabinet.

### Step 9. Regular Collection of Debt Data

- Establish meeting protocol regarding a quorum and venue.
- Ensure circulation of meeting agenda in advance of meetings.
- Schedule regular meetings of FPAC members and resource persons.
- Ensure participation of Finance Secretary or his designate in meetings.
- Prepare and circulate detailed minutes with clear follow-up action.

### Step 10. Prepare Regular Reports

- Establish report format and periodicity — *e.g.*, biannual reports.
- Determine report recipients.
- Post on web site under the *Right to Information* (RTI) legislation.

### Step 11. Publish Completed Studies

- Establish a publication format and periodicity — *e.g.*, annual reports.

- Determine circulation list, which should include — at a minimum — the Chief Minister, his cabinet, principal departmental secretaries, and all state legislators.
- Post on Web site under the *Right to Information* (RTI) legislation.

## Annexure 9:
# Public Debt Management Links

## Virtual Links

**www.kar.nic.in**
National Informatics Centre, Karnataka State Unit…Please note that this page also provides links to the Web sites/web pages of Government Ministries/Departments/Organizations.

**http://jharkhand.nic.in/**
NIC, Jharkhand State Unit, Ranchi.

**www.cgg.org.in**
Established by the state Government to plan and guide governance reforms in Andhra Pradesh.

**http://www.sustainable.ufl.edu/indicators.pdf**
This report was prepared in accordance with the Global Reporting Initiative's (GRI) June 2000 *Sustainability Reporting Guidelines*. The mission of the GRI is to promote international harmonization in the reporting of relevant and credible corporate economic, environmental, and social performance information to enhance responsible decision-making……

## Professional Societies

**www.cbpsindia.org**
The Centre for Budget and Policy Studies was formed in January 1998. It is an independent, nonpartisan, not for profits society based in Bangalore……..The mission of the Society is to contribute through research to understanding and implementing a process of sustainable and equitable development in India, with a focus on the local level. In this process, the budget process is a very useful tool to work with………………

**www.cbpp.org**
The Center on Budget and Policy Priorities is one of the nation's premier policy organizations working at the federal and state levels on fiscal policy and public programs that affect low- and moderate-income families and individuals.

**www.icma.org**
The Center on Budget and Policy Priorities is an international association that assists local government officials to improve public service delivery and governance. There are some interesting budget-related documents and newsletter articles available on their Web site. Their monthly newsletter is called the *ICMA Public Management Magazine*.

**www.gfoa.org**
The Government Finance Officers Association (GFAO) is the premier public budget and finance officers professional society in the United States. There are many informative public finance management-related documents and links available on their Web site.

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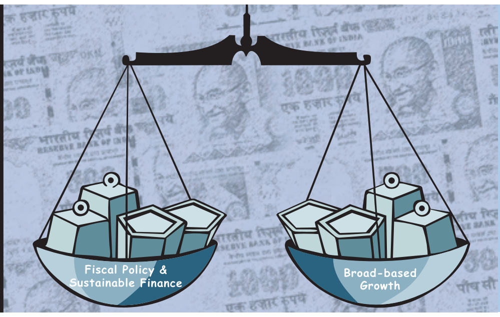



# Annexure 11

# Toward Improving Debt and Investment Management at the Indian State Level:

## Case Studies of Jharkhand, Karnataka and Uttarakhand

## Part 1:
# Overview

The following Parts provide a comparative account of how the REFORM Project state teams in Jharkhand, Karnataka, and Uttarakhand implemented their various debt and investment management reform activities. These accounts discuss the implementation methodology, work plan execution, operational challenges and how these were dealt with and, finally, the results of this work. Finally, these state team accounts have been approved by each respective state government counterpart for use in this compendium.

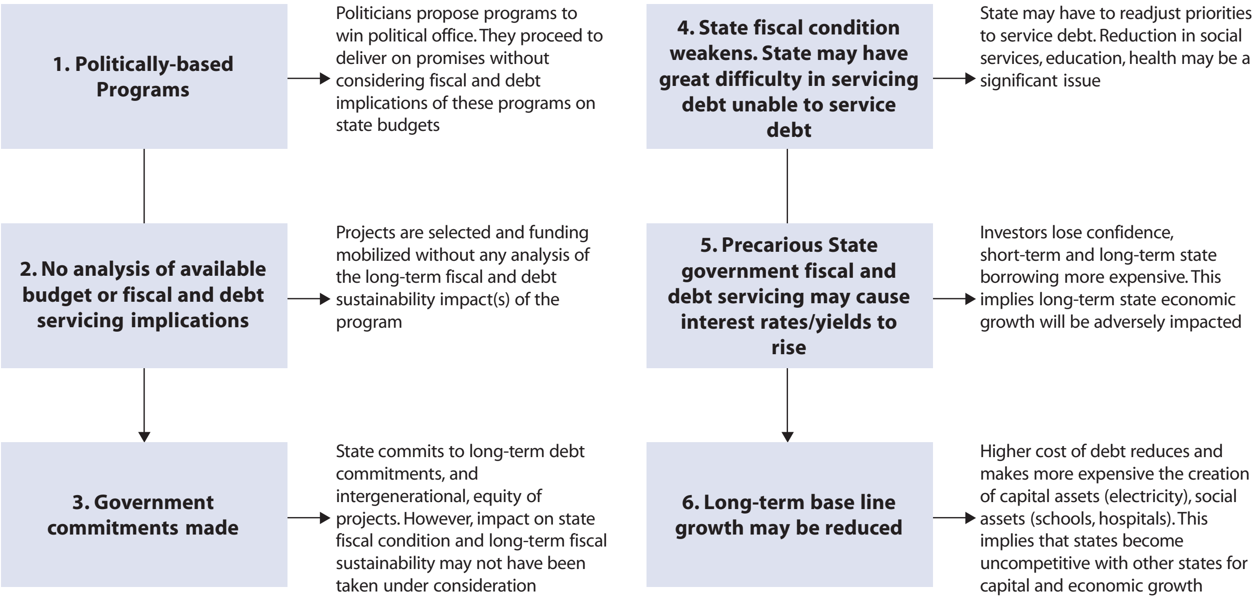
The Debt and Investment Management interventions of the REFORM Project were designed to assist state governments to have a well-defined debt management program to document, track, and assess implications of debt, contingent liabilities and investments on states' financial health on medium- and long-term basis. The pre-existing gap between state liabilities and the state governments' knowledge and proactive management of its debt portfolio led to a number of negative consequences in the expenditure practices, namely:

- Total current state-held debt is one-third (33 percent) of gross State domestic product;
- All Indian State governments spend at least one-fifth (20 percent) of total expenditures on debt servicing;
- Interest payments alone constitute at least one-fourth (25 percent) of revenue receipts;
- High state debt service payment obligations very simply imply:
  - Less funding available for infrastructure (e.g., water, sanitation, roads);
  - Less funding available for social sectors (e.g., Education, Health);
- All States sector spending equals:
  - Education Sector—Five (5 percent) percent of total spending;
  - Health Sector—less than one and a half percent (1.4 percent) of total spending;
  - Water and Sanitation—less than one percent (0.76 percent) of total spending; and
  - Urban Development—less than one-half percent (0.47 percent) of total spending.

Developed countries with developed markets and a wide investor base face relatively low and easily manageable risks in debt management. Even high debt levels can be financed in the domestic markets, and while high deficits will only result in increasing spreads, this may be enough for macroeconomic policy to consider fiscal improvements. Since debt structures are usually good any yield increases are gradual, drastic fiscal cuts can be avoided. With small currency borrowing, the temporary extra financing needs could be covered until economic problems are resolved. There the public debt managers of many developed country economies usually have many alternatives and market problems have relatively modest and gradual effects on the budget. Of course, in case of excess fiscal policy, even in a developed country may face severe consequences, but these appear on very high and increase debt level.

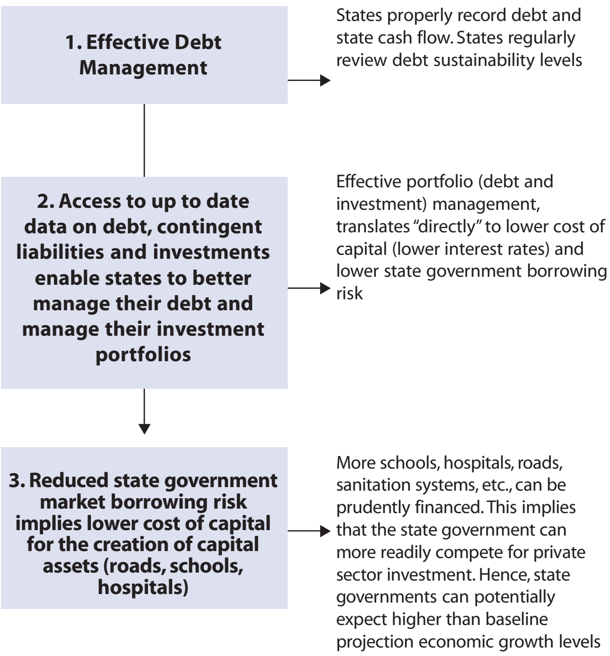
Developing market state and national governments confront more difficult situations in public debt management. The reasons for that are widespread. India, for example, has a relatively small capital market. Unsuccessful issuances will not only mean less money for the government, but through decreasing investor's confidence maturing short-term debt will not be renewed and a severe

## Figure 11A1.1: Vicious Debt and Investment Management Process




Note : Vicious process refers to a situation where a series of actions leads to increasingly negative results

## Figure 11A1.2: Virtuous Debt and Investment Management Process




Note : Virtuous process refers to a situation where a series of actions leads to increasingly positive results

financing problem can evolve. There are many risks that state governments and their debt managers are facing, therefore, a prudent approach is needed. Asset liability management as proposed by REFORMS debt and investment management unit is a tool normally used for private companies or financial companies, like asset managers. The idea is that market risks and/or financial risks can be managed or limited on an acceptable level if the assets and the liabilities are maintained with similar risk characteristics. Any deviation in the value of the liabilities (e.g., debt) will be followed by a similar movement in the value of assets therefore the net value of that state governments assets will be largely unaffected.

To this end, REFORM offered a complete set of expertise covering all phases of debt and investment management. Specifically:

- Development of practical manuals in debt, investment, and contingent liability management;

- Preparation of the operational terms of reference and protocols for the DIMC;
- Consolidation of all state debt, investment, and contingent liability data into one *Microsoft (MS) Excel* dataset;
- Preparation of a guide for improving state creditworthiness and bond issuance;
- Development of reporting templates and protocols for use by the DIMC;
- Training and implementation of the *Commonwealth Secretariat—Debt Recording and Management System (CS-DRMS)* software; and
- Supervising migration of the *MS-Excel* dataset to the *CS-DRMS Oracle* database and subsequent report generation.

Table 11A1.1 shows the debt and investment management achievements of the REFORM Project in its three (3) partner states—Jharkhand, Karnataka, and Uttarakhand—as well as nationally:

Finally, the REFORM team has learned the following key lessons that can be leveraged by other state governments interested in introducing new expenditure management tools and techniques:

- The passage of the *Fiscal Responsibility and Budget Management (FRBM) Act* provides the legal and operational context in which debt and investment management work will take place;
- Obtaining the early and strong and coordinated support from the Principal Finance Secretary, the state Comptroller and Auditor General, and—if present—the state RBI office—will greatly facilitate launching the debt management capacity-building and dataset compilation and consolidation programs in each partner state;
- Consolidating all state debt, contingent liability and investment data is a critical step in proactive debt portfolio management;
- Appointment of dedicated debt cell (DIMC) team members creates the critical mass and requisite team cohesion and continuity needed for the consistent and disciplined management of a state debt and investment portfolio;
- Appointing a team of debt cell officers proficient in the use of *MS Excel* and other software applications is essential to ensure compilation, maintenance and migration of the initial data set to the *Oracle*-based *CS-DRMS* database;
- Passage of Government Orders (GO) requiring the use of the *CS-DRMS* software for debt and contingent liability reporting as appendixes to the annual budget submission to the state legislature ensures maintenance of a valid and current debt database and reporting of the same;
- Official request for the involvement of the Government of India (GoI) Ministry of Finance (MoF) provides, enables and facilitates implementation of the *CS-DRMS* software;
- A good operational relationship between the state finance department and the State Auditor General (SAG) to ensure access to current and accurate debt, investment, expenditure, and contingent liability data for populating the *CS-DRMS* database; and

### Table 11A1.1: REFORM Project Initiatives, Impact and Leveraging

| Government | Achievement | Impact | Leveraging |
|---|---|---|---|
| **Jharkhand** | GoJ has established an FPAC and DIMC unit (as previously reported). The DIMC unit has one active (albeit part-time) member | • The DIMC member tasked with standardizing debt reporting requirements along the lines recommended by REFORM<br>• DIMC/FPAC is tasked with regular government analytical reporting; and<br>• DIMC must now present a report on current GoJ debt sustainability levels, establishing state government benchmarks, and developing a state debt "traffic" light warning signal of indicators | State budget line and staff appointments to DIMC |
| | GoJ has introduced *CS-DRMS* into their normal operational environment | Previous debt and contingent liability datasets have now been migrated to the *Oracle*-based *CS-DRMS* database | State budget line and staff appointments to DIMC *CS-DRMS* team; and *Commonwealth Secretariat* funding and technical support for use and maintenance of the *CS-DRMS* databases |
| | REFORM provided state government officials with debt data templates to begin the task of collecting debt, contingent liability and investment data more systematically | GoJ and the debt unit of the state's FPAC began to reorganize the data along the lines REFORM suggested | |
| **Karnataka** | Created a Debt and Investment Management Cell (DIMC) which would be tasked with analyzing, evaluating, monitoring and managing the State's debt, investments and guarantees (contingent liabilities) | DIMC is reporting along lines suggested by REFORM but have adjusted to their particular reporting requirements | State budget line and staff appointments to DIMC |

**Table 11A1.1: REFORM Project Initiatives, Impact and Leveraging (Contd.)**

| Government | Achievement | Impact | Leveraging |
|---|---|---|---|
| **Karnataka** | GoK has introduced *CS-DRMS* into their normal operational environment | Previous debt and contingent liability datasets have now been migrated to the *Oracle*-based *CS-DRMS* database | State budget line and staff appointments to DIMC *CS-DRMS* team; and *Commonwealth Secretariat* funding and technical support for use and maintenance of the *CS-DRMS* databases |
| | Developed and delivered an operation and procedures manual has also been developed in three parts to assist practitioners with the monitoring and management of state government debt, investments and government guarantees | | |
| | Provided debt preparation tables to begin the process of documenting debt in a more comprehensive and systematic manner | • GoK data assembly templates to collate all (paperbound) state government explicit contingent liabilities into consolidated guarantee tables<br>• The GoK is now using these tables to gradually assemble its explicit guarantees in a systematic manner | |
| | Provided GoK offices with an Investment analysis and internal procedures manual for evaluating state government investments | GoK established a state investment department which is currently using many of the templates and reporting streams proposed by REFORM | |
| | Training and reference material for the effective management of state government debt, investment and guarantees to government officers to enable the Government of Karnataka to carry these operations in a sustainable manner | | |

## Table 11A1.1: REFORM Project Initiatives, Impact and Leveraging (Contd.)

| Government | Achievement | Impact | Leveraging |
|---|---|---|---|
| **Uttarakhand** | GoU has established a DIMC unit, which has one active (albeit part-time) member | The DIMC member has been tasked with standardizing debt reporting requirements along the lines recommended by REFORM. Further, the DIMC/ FPAC is currently tasked with regular government analytical reporting | State budget line and staff appointments to DIMC |
| | GoU has introduced CS-DRMS into their normal operational environment | Previous debt and contingent liability datasets have now been migrated to the *Oracle*-based *CS-DRMS* database | State budget line and staff appointments to DIMC *CS-DRMS* team; and *Commonwealth Secretariat* funding and technical support for use and maintenance of the *CS-DRMS* databases |
| | GoU assembled state government debt information in a single consolidated spreadsheet | State officials used the suggested templates (more or less) as guidelines for data collection | |
| | State government officials have accepted the investment manual | State government officials have already begun the task of collecting state government investment data along the lines suggested by REFORM | |
| **Government of India** | Introduction of international best practice debt management software to improve management of state debt as well as to track and manage contingent liabilities at the subnational level | The *CS-DRMS* software implementation in all three (3) REFORM partner states has provided invaluable field experience for such subnational implementations in India and elsewhere in the world | As the first-ever CS-DRMS subnational implementation in the world, this experience should be able to provide valuable lessons learned for other Indian and non-Indian subnational governments. |
| | *Debt Toolkit* (with guidelines developed for debt, issuance of state guarantees, investment, and creditworthiness) has been finalized | Guidelines are helping partner state governments to proactively manage their debt, contingent liability and investment portfolios | These guidelines can be used by other Indian state governments considering the issuance of state guarantees |
| | Construction of reporting structures for state investment to track, report on and improve its management | Reporting structures are being used by REFORM partner state governments to improve their management, tracking and reporting on public investments | These reporting structures can be used by other Indian state governments to improve their management, tracking and reporting on public investments |

- Periodic press coverage of state debt and investment management efforts of the state government helped to engender public and political interest in these reform efforts that, in turn, reinforces and compels the state government to continue down the reform path.

The following Parts describe the actual debt and management work experiences of all three REFORM project state teams. These work experiences discuss tool and technique implementation methodology, operational challenges and outcomes, and the lessons learned.

**Part 2:**

# The Challenges of State Debt Management

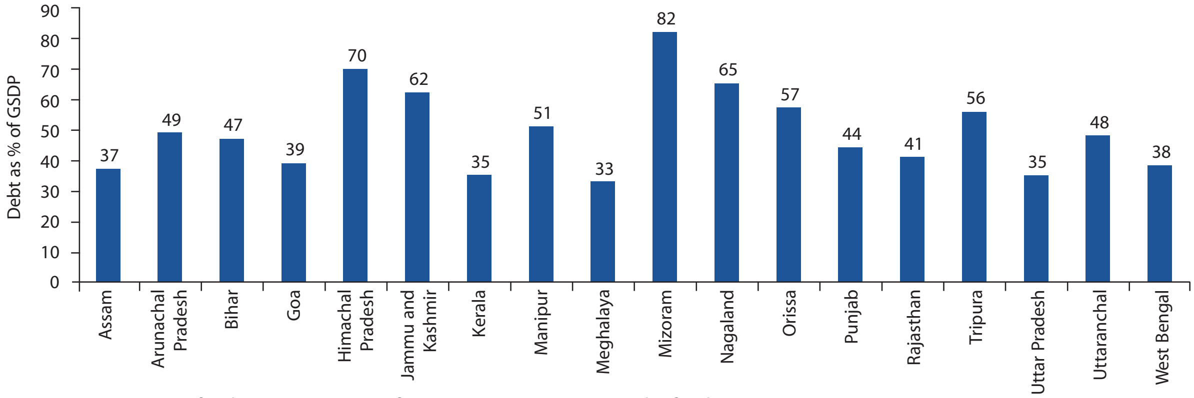
Indian states had the distinction of being among the most highly leveraged subnational governments in the world. In 2000-01, the World Bank estimated that the combined debt-to-revenue ratio of India's states was as high as 203 percent, compared to the World Bank's estimates of 189 percent for the fiscal federation in Canada in that same period, 170 percent in Brazil, and 44 percent in the United States. This indebtedness was attributed to the states habitually spending more than their budgetary resources. The inadequacy of budgetary resources meant that states had to fund current spending by incurring debt and accumulating interest liabilities. Persistent revenue deficits and an ever increasing interest bill caused subnational debt to burgeon leading to a fiscal crisis at the state level in fiscal year 2000 (FY2000) (Figure 11A2.1).

The FY2000 crisis gave an enormous impetus to reforms advocated by the Twelfth Finance Commission ("TFC"), a constitutionally established independent fiscal agency convened every five years. In brief, the TFC determines the devolution of resources from the Centre to the states. The TFC recommended that the Centre stop lending to states, forcing them to approach the market for funds, that outstanding loans from the Centre to the states be consolidated and rescheduled at a lower interest rate, and that debt relive by way of write-offs by linked to a reduction in revenue deficits. State government market borrowing had largely been limited through the Reserve Bank of India (RBI). However, the TFCs recommendation to discontinue central government loans to state governments for plan funding required Indian states to mobilize larger resources from the market.

## Trends and Practices

The states relative freedom to borrow resulted in the breach of constitutional borrowing limits and deteriorating fiscal deficits over time. The breaching of constitutional limits could in part be attributed to institutional factors. Indian states are required to incur a certain amount of expenditure

**Figure 11A2.1: State Debt-to-GSDP Ratio (Uttarakhand 2003-04; All Other States 2001-02)**



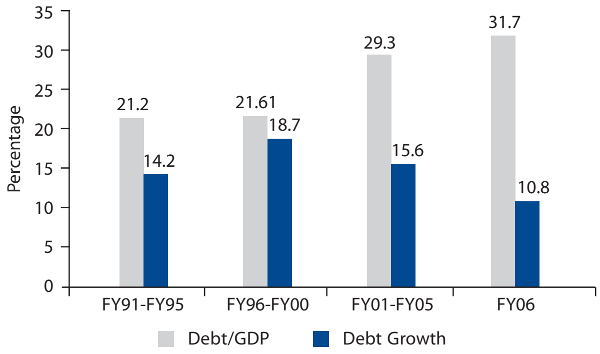

Source: Government of India (GoI), Ministry of Finance (MoF), Reserve Bank of India (RBI), State Governments (Various).

under their five-year plans. In brief, these are economic development agendas mapped out by the Planning Commission and bilaterally negotiated between the state government(s) and the Planning Commission. The central government provides part of the resources for these plans by way of loans and grants. Indian state governments are required to provide the remainder either from their own tax and nontax revenues or through debt from other sources. Neither state governments nor the Planning Commission were required to undertake any systematic evaluation of state debt sustainability before the borrowing limits for state plans are negotiated. Heretofore, this institutional arrangement is one of the reasons why state debt levels escalated (Figure 11A2.2). The total outstanding liabilities of Indian state governments increased from an average of 21 percent of GDP for FY91-FY00 to 29.3 percent for FY01-FY05. Debt growth averaged about 16 percent in FY91-FY00 period. It has since moderated.

State government debt composition was already beginning to change. A snapshot of state government borrowing over a 15-year period (1991-2006) indicates that state governments increasingly approached the market to raise resources. Additionally, a sharp decline in the proportion of loans from the centre occurred—primarily on account of the reclassification of loans from small savings funds. Nevertheless, in 2004-06 the relatively high cost small savings funds remained a primary source of about one-fifth of state debt.

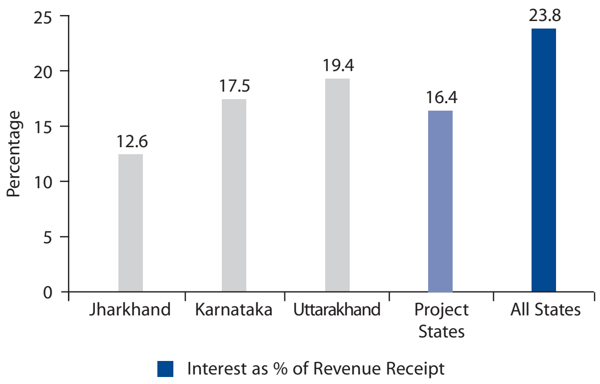
Figure 11A2.3 provides a portrait of selected state level interest payments as a percent of total revenue receipts for 2002-03. The benchmark used by the Ministry of Finance (MoF), Government of India (GoI) is 18 percent (interest payment as a percent of total revenue receipt). In other words, all states whose interest payment are greater than or equal to 18 percent are considered to be financially distressed. In 2002-03, virtually all Indian state governments found themselves above the threshold eighteen (18 percent) level. With the restructuring of its long-term high interest rate loans to the Centre, REFORM project states (Jharkhand, Karnataka, and Uttarakhand[72])

**Figure 11A2.2: Indian State Debt Growth (1991-06)**




Source: RBI, Fitch, MoF.

**Figure 11A2.3: Interest Payments as % of Revenue Receipt (FY 2002-03)**




[72] The state of Uttaranchal changed their name to Uttarakhand in 2004-05.

were able to reduce their near-term interest rate burden and fall below or hover marginally above the benchmark threshold.

The tougher budget constraints that Indian state governments faced prompted them to shift a lot of financing activities off-budget. The most significant off-budget liabilities for state governments have been those arising from subsidies to the power sector. State government guarantees were increasingly used to support borrowing via special-purpose vehicles. These guarantees should be considered as actual rather than contingent liabilities, as they will devolve into the state budget should they be invoked.

## Indian State Governments: Gaps to Modern Debt Management Practices

A historical snapshot of Jharkhand, Karnataka and Uttarakhand prior to USAID-REFORM intervention indicates varying levels of debt management capacity. In 2002-03, Uttarakhand and Jharkhand, being newly established states, had nascent ability to manage debt. Karnataka was more sophisticated with its debt recording and management analysis ability. A generalized review of state debt management ability indicates that state debt (and contingent liability management) did not correspond to the demands placed on a modern system of state debt and liquidity management. In brief:

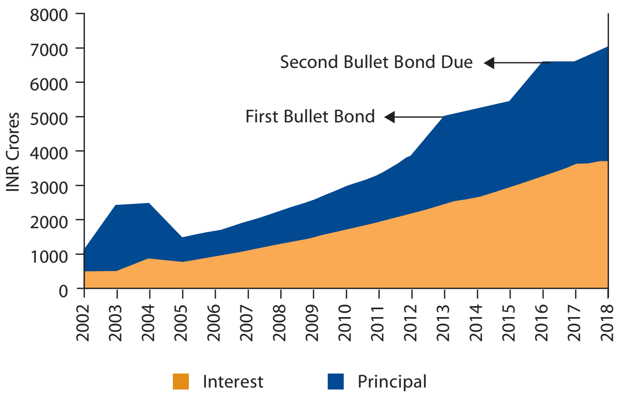
- The determination of strategic goals in a midterm and long-term horizon was missing. Decision-making was supported with limited financial analysis and forecasting;
- There was no integrated information system in place. Recording of debt, contingent liabilities, and state government investments at the state level was ambiguous, nontransparent and inexact;
- Debt service calculation was performed via manual inputs without additional preparation and controls;
- There was a total absence of risk management systems and analysis: Risk management from methodology of risk analysis, through monitoring and evaluation are completely nonexistent. A brief case-in-point, the long term debt forecast is contingent on macroeconomic projections on the fiscal stance made by the state's Department of Finance. There is some basic sensitivity analysis performed in terms of alternative scenario. Yet, there was no systematic evaluation of risks to the state budget and the potential risk contribution of a certain debt structure strategy within the present framework; and
- Uttarakhand, Jharkhand and Karnataka needed to strengthen its legal framework for debt management; upgrade its staff capabilities to deal with debt management issues; and improve the information available for debt management tracking and reporting through new or expanded automation capabilities.

A critical issue was how to improve state government debt accountability and monitoring and to increase the access of state governments to financial markets, broadly defined as the banking system and the securities market. Information and state government accountability are key factors in the effective operation of state debt markets. Assessment of risk, crucial for determining the cost of capital, requires state governments to produce reliable, complete and timely financial information. Without the discipline of the hard budget constraint, financial markets and credit assessors have little reason to distinguish among the various state government credits, and the rationale for market allocation of resources is consequently lost.

## Did the State Governments have the Capacity to Succeed?

Jharkhand and Uttarakhand should be viewed under a different set of optics than Karnataka. Both Jharkhand and Uttarakhand were newly created states with reasonably well trained and forward thinking Finance Departments. However, as newly created states they were lacking in human resource capacity. Conversely, Karnataka a long-standing state that has been reasonably well managed could devote resources to improving its fiscal management operations.

### Figure 11A2.4: Uttarakhand Interest and Principal Debt Repayment Forecast (FY 2002-18)




## Were Indian State Governments Forward Looking?

The FY2000 subnational debt crisis gave an enormous impetus to reforms and the introduction of numerous polices aimed at fiscal rationalization at the federal and state levels. On the debt front the TFC recommended that GoI should stop providing loans to the states and that the states should take recourse to the financial markets for meeting their borrowing requirements. The TFC recommended the consolidation of existing debt extended by the centre to the states up to FY2004 and outstanding at FY2005, conditional on the states adopting Fiscal Responsibility and Budget Management ("FRBM") legislation.

Figure 11A2.4 provides an illustration of the restructured Uttarakhand restructured debt and estimated repayment of bullet bond maturity dates under a "no change" in fiscal responsibility scenario. In effect, without the leverage of fiscal responsibility fiscal deficits and mounting debt would once again begin to overwhelm state finances. However, the leverage of fiscal responsibility legislation forced Indian states to begin to tighten finances, introduce financial management reforms, and proactively keep their fiscal house in order. The newly created states, Jharkhand and Uttaranchal began the cumbersome process of archiving their financial liabilities (balance and off-balance) and began to undertake basic cash flow (debt service) analysis for their primary outstanding obligations.

Historically, Indian states have been able to raise the greater part of their funds from the market on equal terms (i.e., terms that do not reflect their independent creditworthiness). This is because the Reserve Bank of India (RBI), which acts as a merchant banker to the states, packages a mix of bonds issued by different states under an umbrella tap tranche, whereby a targeted amount of combined borrowings for all states are raised at a predetermined coupon without specifying the individual state. As a result, RBI encouraged investors to buy paper with varied credit risks at the same rate. This in effect, caused better managed states to cross-subsidize the worse managed states. When states were first allowed to approach the market individually in 1999-2000, using the auction method, with a predetermined notified amount, but not a predetermined coupon rate, states with better financials could avail themselves with more favorable borrowing terms. This act alone precipitated the need for states to not only get their fiscal house in order, but has prompted state treasuries to proactively manage their debt.

As a reasonably well-off and long-standing state, Karnataka had different debt issues to confront than did Jharkhand and Uttarakhand. Even in 2003-04, Karnataka had a reasonably robust "shadow credit" rating provided by the various Indian credit rating agencies. Further, Karnataka also kept detailed records of their borrowings from the Centre and had documentation with respect to their off-balance liabilities. Where Karnataka needed to improve was in its archiving (recording) and record-keeping of both its balance and off-budget liabilities (e.g., state government guarantees), providing better cash and risk management profiles of its balance and off-balance liabilities, and engaging in systematic evaluation of state debt. Karnataka was already beginning to take steps to surgically improve some of these shortcomings.

## Part 3:
# REFORM's Response to these Gaps

The primary objective of a government's debt management strategy is to finance government borrowing needs efficiently and to ensure that the government's debt servicing obligations are met.[73] Another objective is to ensure that the government debt portfolio is managed according to the government's costs and risk objectives (Wheeler 2004). However, a goal of minimizing debt-servicing costs (irrespective of risk) should not be considered as an explicit objective. This strategy can result in riskier borrowing structures than might be warranted. In effect, adverse shocks to the macroeconomic environment can result in higher than projected debt-servicing costs, reduction in government services, and potentially higher tax levels.

In developing a state government debt management strategy, government debt managers are confronted with a number of strategic choices as to the proposed (and, desired) financial characteristics of the debt. The debt management strategy must include (but is not limited to) the following: i) an understanding of the desired maturity structure and liquidity of the debt; ii) the duration and/or interest rate sensitivity of the debt; and iii) determining whether the debt should be transformed through swaps, buybacks, or through new issuance. Many of these strategic debt management decisions involve difficult financial (and, political) trade-offs. For example, if there is a high inflation (or default) risk premium built into longer-term debt rates; short-term debt may be expected to be cheaper (than long-term debt). However, excessive short-term debt increases risk by increasing the volatility of debt servicing costs and may pose future liquidity risk.

Because short-term debt requires more frequent refinancing, there is always the risk that the state government may be unable to access the markets at an optimal interest rate spread. Sound debt management strategies generally involve analyzing fiscal policy and macroeconomic environment issues and linking this analysis to the government's debt management and other economic policies. In building the capacity to manage state government debt, it is essential that the starting point begin with the establishment of a set of governance practices embodying a detailed debt management manual which outlines the risk management practices and policies of the state government.

### Interface between Debt Management and Fiscal Policy

How should fiscal policy advisers and state debt managers' interface with each other? Fiscal (and, monetary policy) advisors share a common interest with debt management advisors in ensuring that the growth of public debt remains on a sustainable path such that a sound fiscal policy remain in place and that excessive debt levels can be reduced. Both the fiscal and debt management policy advisors should be involved in developing state-level objectives and a risk management framework for state government debt management.

Close coordination is required between the state government's fiscal policy advisors and its debt mangers in preparing budgets and other fiscal projections. As inputs to these projections, state debt managers generally run debt servicing forecasts which are then, in turn, linked to the state's fiscal policy projections. The

[73] Wheeler, Graeme, (2004) "Sound Practice in Government Debt Management" Pp 13 World Bank: Washington D.C.

responsibilities of the debt management advisors also include providing advice on the size and the composition of the state government's borrowing program and how the proposed debt structure can be amended in light of changes in the state's fiscal program or near- and future-projected cash (liquidity) position. Considerable coordination and exchanging of information is required between the debt manager and the state treasury operations in daily cash management. Reliable forecasts of government departmental expenditures and revenue flows, combined with future debt servicing obligations are needed in order to determine the near- and long-term liquidity requirements of the state government.

## Rational for Interventions

The India State Fiscal Management REFORM Project worked with the Government of India and each of the three states—Jharkhand, Karnataka and Uttarakhand—to reverse the negative fiscal trends defined above. Reversing the fiscal (debt, investment, contingent liability) trends required several different kinds of assistance over the past three to five years including:

- Defining new organizational structures—Debt and Investment Management Unit;
- Suggesting amendments to existing laws or procedures to add more discipline to financial management and the development of policies with financial effects;
- Developing analytical tools (databases and models);
- Training staff in analytical and debt management techniques;
- Defining more effective governmental information systems and communication processes; and (Commonwealth Secretariat Debt Management Systems (CS-DRMS).

Thus, the project's vision was to have in place in each state the organizational structures, debt management analytical tools, decision processes, communication channels, information sources, and trained staff that will enable the states to maintain a prudent debt, contingent liability and investment management (balanced fiscal posture) on a sustainable basis. Achieving this outcome would enable the states to reverse the debt spiral and, over time, be able to gradually allot additional public resources to the more productive development and infrastructure needs.

It was essential for REFORM in these three states as well as all states that are in fiscal distress to work toward this vision. Failure to do so would have caused the debt load to increase, resulting in more and more public resources being allocated to unproductive debt service costs, and fewer resources being allocated to productive use. Ultimately, this could place more pressure on the Government of India (GoI) to provide increasing amounts of financial aid to the states, particularly in connection with the nation's broader social and economic agenda. However, the Government of India faces its own constraints in setting fiscal and monetary policy. In this manner, spiralling state debt could lead to diminished real economic growth. Fortunately, each of the three states articulated its concern with this situation, and each state expressed keen motivation to address the problem.

## What Process Steps were Undertaken in REFORM States?

REFORM's vision was geared to improving the states' fiscal situation on a sustainable basis. All forms of debt, investment and contingent liability assistance were designed to this end. For example, training sessions included employees at mid- and lower-levels of the organization, the ones who are likely to be in the operative positions for a longer period of time than their managers or leaders. Another way REFORM instituted sustainable reforms was by providing technical assistance face-to-face with the permanent staff after the training has been provided. This served as reinforcement to the training. And finally, in reforms that involve more tangible products (e.g., advice on new information systems, or helping implement amended laws or procedures), REFORM provided advice, guidance and assistance with the selection and implementation of appropriate debt management software. In this manner, the states have taken ownership of the new structures and the reforms will stand a better chance of being infused into the way states do their business on an ongoing basis.

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### What Operational Constraints were Encountered?

Operational constraints that occurred at the state level during the life of the REFORM project included:

- A substantial problem at the state level is the lack of state debt, investment, and contingent liability data warehousing (database) and analysis. A significant level of debt information is retained by the Accountant General (AG), but states (in general) do not have efficient debt and contingent liability inventorying and archiving systems. In many state government offices, the debt management information process consists largely of recording transactions either in handwritten ledgers of in excel spreadsheets;
- State level debt recording are not marked to market, calculation of portfolio duration is difficult, and only rudimentary scenario analysis is possible. However the complexity of the decisions and transactions handled by State government debt managers has increased significantly;
- Budget staff resources are allocated disproportionately to the areas of budget control and the release of funds, with inadequate resources allocated to budget planning, evaluation, and analytical studies of policy options; and
- While all states were on a path of improving computerization of treasury operations, this was not being done with adequate attention to changing many related business processes. There were inadequate structures in place to review or simplify the existing processes, or to question if there are alternative ways to better utilize the computerized systems and, there has not been adequate planning to integrate the required changes in budget format and presentation associated with future budget reforms.

### How were these Constraints Overcome?

Some, albeit not all of these constraints, were overcome in the following manner:

- REFORM developed a "Debt Management Unit—Overview and Proposed

Organizational Structure" manual. This manual presents a basic guidebook for states in describing effective debt management, the importance of debt portfolio management and presenting a review of an effective debt management operation and reporting structure. All states have used elements of the manual to assist them in their development of their Financial Responsibility Act (FRA). As Karnataka already has a FRA, they have also asked for and received comments from REFORM on how to improve their FRA and contingent liability processes;

- REFORM developed a data flow diagram to identify state debt and investments. These data flow diagrams follow the coding scheme practiced by the AG's office. Both the data flow and data field diagrams were be submitted to state government officials;
- A key question confronting many state governments is whether to adopt computerized systems and, if so, how sophisticated and comprehensive should those systems be. Sound management information systems are essential for asset and liability management. However, systems development is an area in which substantial amounts of funds, management and staff time can be deployed and expensive mistakes can easily be made. A primary lesson learned, is that state governments should review with caution introducing new IT systems into their general financial management operations. The following core functionality is required in the successful maintenance and operations of debt management systems: *Capture of Market Data; Risk and Performance Analysis; and, Debt, Investment and Contingent Liability Recording and Debt Analysis*. It may not be possible to capture all of these capabilities in one system. If additional systems are involved it is important that they share a common database or data warehouse to satisfy concerns about data integrity and security;
- The adoption of an off-the-shelf software program would greatly enhance each state's ability to monitor and analyze their current debt status. REFORM introduced Uttaranchal, Jharkhand and Karnataka to the Commonwealth Secretariat Debt Recording and Management (CS-DRMS) analysis software; and
- Only by enforcing budgetary controls at the time that financial assistance is committed can the appropriate budgetary incentives be realigned to eliminate the potential for moral hazard. There are a number of policy options, benchmarks, and reporting procedures that a state can undertake to minimize the potential financial hazards with respect to contingent liabilities. REFORM devised a Contingent Liability Policy Manual which serves as the guiding principal(s) for reviewing, appraising, and documenting contingent liabilities. The purpose of the guarantee and contingent liability manual is: (i) understand the basic underpinnings of state government guarantees and contingent liabilities; and (ii) review State Government Official Memorandums, Governments Orders and Circulars with respect to government guarantees and prepare a draft set of recommendations to enhance the state's contingent liability policy. The government guarantees and contingent policy manual is divided into the following five (5) sections: Assessing the Fiscal Risk of State Government Guarantees; Reform Measures in the State; Contingent Liability Manual; Application of Guarantee Fees; and, Basic Requirements for Evaluating Investment Projects.

## Establishment of Debt Management Unit

As part of its primary role, REFORM assisted in the establishment of Debt (and Investment) Management units to assist the three state governments. The organization of a debt (contingent liability, and investment) management cell may vary from country-to-country and from state-to-state but several key areas of responsibility or functional duties were developed in order for a state to achieve a seamless integration between the fiscal policy side and effective debt management. The debt unit was assisted in: i) developing an effective data base of all state balance and off-balance obligations; ii) producing effective cash flow projections; iii) establishing a cost and risk management strategy or framework for the State government's debt portfolio; and iv) monitoring compliance with the state's portfolio and risk management policies. With respect to monitoring compliance with the state's debt portfolio, this means that the debt management unit's responsibility covered broad obligation's on the government's balance sheet including (but not limited to) guarantees and other contingent liabilities. Using the state government's preferences with respect to expected cost and risk, the debt management unit stated to establish a set of portfolio management policies, discuss and obtain approval from the Department of Finance and performed a mixture of research, analysis and due diligence with respect to the state's debt management portfolio position.

## Contingent Liability and Investment Procedures Manuals

The Governments of Jharkhand (GoJ), Uttarakhand (GoU) and Karnataka (GoK) have established a Debt and Investment Management Cells (DIMC). These cells are tasked with analyzing, evaluating, monitoring and managing the state's debt, investments and guarantees (contingent liabilities). As part of this undertaking, the state governments have developed three manuals to assist in its practitioners with the monitoring and management of state government debt, investments and government guarantees.

- Volume I is "Debt Management Unit Organizational Structure and Procedures Manual."
- Volume II is "Government Guarantees and Contingent Liabilities: Commentary and Contingent Guarantee Policy Instructions."
- Volume III is "Effective Monitoring of Investments: A General Review and Instructions Manual."

In planning the structure and content of the above mentioned trilogy of manuals, the contributing authors and state governments were mindful of the existing international and Indian best practices and the literature on the subject which addresses specific elements of the management of government debt, investment and guarantees. The trilogy of manuals, nevertheless, should be viewed in the nature of a work-in-progress, and as an ongoing effort of the MoF and REFORM to provide Indian state governments with a comprehensive reference source for the development of an effective management of state government debt, investment and guarantees.

## States Going to Market and Creditworthiness Guide

State government market borrowing has largely been limited through the Reserve Bank of India

(RBI). However, the TFC's recommendation to discontinue central government loans to state governments for plan funding will require Indian states to mobilize larger resources from the market. State government borrowing is not an end in itself. Ideally, it should be used to obtain long-term capital for expenditures that provide benefits that stretch into the future. Repaying state government debt represents the fulfilling of an intergenerational contract obligating those who benefit from the capital investment to pay their share of the costs. Successfully incurring and repaying debt is an affirmation that state governments are capable of planning for the future and fulfilling their obligations.

The gap between the ideal and the real in Indian state government borrowing in the domestic capital market is substantial. The challenge to raise funds from the market by state governments comes at a time of transition and uncertainty. There is increasing pressure to make state governments (and governments at all levels) more accountable to citizens and more attuned to the demands of the marketplace. This sensitivity to market behavior includes the drive to make more activities self-supporting. A critical issue is how to increase the access of state governments to financial markets, broadly defined as the banking system and the securities market.

Credit market access has been approached from various angles in REFORM's *State's Going to Market and Creditworthiness Guide* ("Creditworthiness Guide") including: the changing nature of Indian state government borrowing, state debt management operations, mechanisms to enter the nonSLR bond market, and the organization and regulation of the financial market. Other areas that are reviewed include the likely investor groups, the need for information to analyze credit, credit rating and finally, private insurance (or enhancement) of state government securities. This Creditworthiness Guide explores the market for state government debt in the Indian context and is presented in six parts. The first five parts establish a framework for understanding the debt market in the Indian context and the manner in which the current debt market functions, the market structure, operation and regulations, the kinds of security instruments that are available, and the main participants in the market. In these sections, the mechanisms for state's going to market on their own, state creditworthiness, and monitoring of oversight of state debt is brought into focus. The final section provides general guidelines and recommendations.

While there is no one right way of developing and expanding the Indian state government securities market, there are ways to facilitate the success of a state government bond market. Elements that are essential for expanding the demand for state government securities include:

- The financial marketplace should be free to work with state governments to decide on the types of instruments and associated payment structures to employ;
- Wherever possible, it is best to introduce and promote competition into the state securities market; and
- Public and timely reporting on the terms, conditions and other provisions of loans and bond offerings is a necessary complement to supporting a competitive state securities market regime.

Information and state government accountability are key factors in the effective operation of state debt markets. Assessment of risk, crucial for determining the cost of capital, requires state governments to produce reliable, complete and timely financial information. Without the discipline of the hard budget constraint, financial markets and credit assessors have little reason to distinguish among the various state government credits, and the rationale for market allocation of resources is consequently lost.

## Review of REFORM Interventions

A brief state-by-state review of REFORM efforts follows:

### Karnataka

As REFORM began operations, Karnataka had pre-existing time series with respect to GoI and other related debt time series. However, some of their potential liabilities were not comprehensively documented. The Government of Karnataka (GoK) had assembled a collection of its guarantees in a series of paperbound volumes. REFORM provided the GoK and other REFORM states with debt preparation tables to begin the process of documenting debt and guarantees in a more comprehensive and systematic manner. The GoK used these tables to gradually assemble its explicit guarantees in systematic manner.

REFORM provided GoK officials with an Investment analysis and internal procedures manual for evaluating state government investments and guarantees. Further, REFORM members proposed substantial reporting requirements for government investments with a large balance sheet, and more limited reporting requirements for other state government investments. GoK established a state investment department which is currently using many of the templates and reporting streams proposed by REFORM. The process of collecting and evaluating state government investments takes time.

**National governments can provide an environment to promote marketability of state government debt. Several questions arise when considering assistance for state governments, especially those states that may have limited opportunities to gain access to credit. How should developmental resources be allocated? Further, what administrative and technical assistance should be used to deliver assistance? Technical assistance that familiarizes state government jurisdictions with credit market and multilateral lending institution practices and helps them become more creditworthy will be most useful.**

Government of Karnataka is well on its way to achieving better debt and investment management. However, the issues discussed with the state and in this brief paper indicate the need for a parallel work agenda in "micro" issues related to the analysis of sustainable public finances.

- On the effect of fiscal policy and long run growth, there is a need for better understanding of the impact of different types of government expenditures and different types of taxation on growth and welfare.
- A more in-depth sustainability analysis should be grounded on the comparison between the social rate of return of public expenditures and the social opportunity cost, including the possible costs associated with future distorting taxation. Hence, the design and implementation of the evaluation method is of first order importance.
- Finally, application of the golden rule requires estimates of the rate of depreciation of public capital.

### Jharkhand

Government of Jharkhand (GoJ) began the task of collecting its GoI debt and other outstanding debt information ex ante to REFORMs intervention. However, the data collection task was incomplete and not comprehensive. REFORM provided state government officials with debt data templates to begin the task of collecting debt, contingent liability and investment data more systematically. GoJ established a Fiscal Policy Analysis Cell (FPAC) and Debt and Investment Management Cell (DIMC).

The DIMC has been tasked with standardizing debt reporting requirements along the lines recommended by REFORM. Further, the DIMC/ FPAC is currently tasked with regular government analytical reporting. For example, DIMC must now present a report on current GoJ debt sustainability levels, establishing state government benchmarks, and developing a state debt "traffic" light warning signal of indicators. GoJ and the Debt Management unit organized the data along the lines REFORM suggested.

**State government borrowing is not an end in itself. Ideally, it should be used to obtain long-term capital for expenditures that provide benefits that stretch into the future. Repaying state government debt represents the fulfilling of an intergenerational contract obligating those who benefit from the capital investment to pay their share of the costs. Successfully incurring and repaying debt is an affirmation that state governments are capable of planning for the future and fulfilling their obligations.**

The primary area of concern with respect to Jharkhand was the lack of dedicated, physical resources for undertaking effective debt (and, investment analysis). In order to alleviate this human resource constraint, it was considered essential to enlist one key member of the Finance Department as a sustainable dedicated resource. New states, with evolving financial management practices such as Jharkhand, are best served by institutionalizing and archiving debt and investment data in a standardized platform, and reviewing and revising (where necessary) debt, investment and contingent guarantee manuals as required. Further, it may be necessary to enroll and train a broader range of persons into best practice debt and investment management practices.

### Uttarakhand

With the assistance from REFORM, state government officials assembled state government debt information in a single consolidated spreadsheet. State officials used the suggested templates (more or less) as guidelines for data collection. However, state officials and REFORM agreed that excel spreadsheets are inappropriate format for state debt storage and evaluation. State officials delayed collection/ warehousing of state debt data until the Commonwealth Secretariat debt management (CS-DRMS) software is in place. This would reduce the time spent on collecting and inputting data twice. State officials have collected "explicit" state government guarantees where appropriate.

REFORM Debt, Guarantee (Contingent Liability) and Investment manuals were combined into a single comprehensive operations and procedures manual for use and distribution for a broader number of Indian states. State government officials have accepted these manuals. State government officials have already begun the task of collecting state government investment data along the lines suggested by REFORM.

Uttarakhand presented REFORM with unique challenges. The debt management unit could at best be considered a "virtual" unit. In other words, a unit without a fixed address but consisting of various members of the Finance Department. One of the ways that the state government dealt with this is to anchor the unit with one or two regular employees that would be responsible for debt management. However, in the future, it would be advantageous for Uttarakhand to consolidate its debt management practices in a single physical location with dedicated and permanent staff members.

## Lessons Learned?

National governments can provide an environment to promote marketability of state government debt. Several questions arise when considering assistance for state governments, especially those states that may have limited opportunities to gain access to credit. How should developmental resources be allocated? Further, what administrative and technical assistance should be used to deliver assistance? Technical assistance that familiarizes state government jurisdictions with credit market and multilateral lending institution practices and helps them become more creditworthy will be most useful. Other lessons learned include:

- In addition to data verification, analysis and projections, state governments should ensure that state debt management objectives are clearly expressed and understood by the state's policy and debt management advisors by developing a Debt and Risk Management Policy Manual which clearly outlines the government's objectives and establishes portfolio benchmarks. An unambiguous assignment of responsibilities and accountabilities is needed to ensure effective debt management implementation;
- In outlining its debt management objectives, state governments should specify their risk tolerance or its degree of risk aversion. Decisions in the areas of interest rate risk, term structure, and the volatility of debt-servicing costs are important because states' do have some choices with respect to maturity, and interest rate basis. Making policy decisions in these areas is meaningless, if the desire or capacity to implement them is lacking;
- It is better not to make distinctions among state borrowers as to their powers and the procedures that they are to follow with respect to borrowing. Generic laws (rules) that contain generally broad formulations and simple parameters based on objective criteria are better. Parties to debt transactions should be empowered to design security provisions to meet circumstantial and specific needs, as well as general requirements. Short-term debt should be limited to only providing for cash flow shortfalls in anticipation of realistic income streams to be realized with the fiscal period;
- Indian state government borrowing should fit within the overall regulatory framework for bank and securities markets. Balancing the competitive norms of market efficiency and development while preserving the integrity of the payment system and protection of investors as necessary;
- A secondary market for securities is important to investor liquidity. But formal listing on exchanges should only be required where the potential size of secondary activity justifies the time and expense. A secondary market for state debt can be developed among the over-the-counter markets which may prove to be more efficient for small state issuers of bonds (the bonds/debt that may be traded infrequently);
- A key concern in market regulation is that of disclosure. Subsovereign (state government) securities should be subject to disclosure standards that require both information at the

time of the initial offering and subsequent regular reporting to investors. The focus should be on the process and generic needs. The substantive data needs in meeting such standards may best be left to self-regulatory bodies in the market and to participants in individual transactions;

- Only by enforcing budgetary controls at the time that financial assistance is committed can the appropriate budgetary incentives be realigned to eliminate the potential for moral hazard. There are a number of policy options, benchmarks, and reporting procedures that the State can undertake to minimize the potential financial hazards with respect to contingent liabilities. States should devise a Contingent Liability Policy Manuals which will serve as the guiding principal(s) for reviewing, appraising, and documenting contingent liabilities; and
- In many countries, freely operating credit markets effectively classify borrowers on their own and reflect their credit assessments in the prices charged for borrowing. However, even in these mature markets, regulatory classification is sometimes practiced by central or state governments in order to provide certain privileges to some borrowers or to impose restrictions on others. To guard against imprudent behavior, most national governmental credit systems use classifications. These classifications are not meant to prohibit debt for some classes of borrowers, but to differentiate among jurisdictions in terms of allowable maximum outstanding debt. More typically, the maximum debt outstanding is taken in relation to some revenue source. The strongest argument against rigid classification is that upward mobility between categories of financial strength and managerial maturity should be encouraged. Classifying a government jurisdiction in a way that encourages it to be dependent on external assistance and avoid responsible borrowing on its own should be opposite to the effect the government should have.

Indian state government market borrowing has largely been limited through the Reserve Bank of India (RBI). However, the Twelfth Finance Commission's recommendation to discontinue loans to state governments for plan funding will require Indian states to mobilize larger resources from the market. State government borrowing is not an end in itself. Ideally, it should be used to obtain long-term capital for expenditures that provide benefits that stretch into the future. Repaying state government debt represents the fulfilling of an intergenerational contract obligating those who benefit from the capital investment to pay their share of the costs. Successfully incurring and repaying debt is an affirmation that state governments are capable of planning for the future and fulfilling their obligations. The following section provides some concluding observations and general guidelines with respect to improving the Indian state government securities market.

### Expanding the Playing Field for State Securities

- In promoting the Indian state government securities market, the governing laws and regulations should make clear the legal status and remedies available to investors in state government obligations. The security and enforcement process should be explicit and easy to call on. However, in designing the security and enforcement procedures, the regulators must be somewhat flexible in establishing the boundaries of prudential behavior.

- In addition to developing security provisions to meet general requirements, parties to state debt transactions should be able to design security provisions to meet specific needs and circumstances. Other elements that are essential for expanding the demand for state securities include:
  - The financial marketplace should be free to work with state governments to decide on the types of instruments and associated payment structures to employ; and
  - Wherever possible, it is best to introduce and promote competition into the state securities market.
- Public and timely reporting on the terms, conditions and other provisions of loans and bond offerings is a necessary complement to supporting a competitive state securities market regime.

Even in places where the securities market is not fully developed, and effective competition is limited, the bidding process and full disclosure of transactions should encourage participation in the debt market.

### Financial Market Regulation and Disclosure

A key concern in securities market regulation is proper financial disclosure. State government securities should be subject to disclosure standards that require both information at the time of the initial offering and regular reporting to investors subsequently. State government financial information needs to be promptly disclosed after the close of the fiscal period in clear, consistent formats. For debt monitoring purposes, reporting on a modified accrual basis is essential (as are cash flow statements). A central repository (e.g., State level Debt Investment Management Cell (DIMC)) of financial information on government borrowings is an essential tool in promoting efficient disclosure. The repository should have current data on debt outstanding and information on security pledges and liens. The following measures are recommended for improving the financial disclosure (and, hence the creditworthiness) of Indian state governments:

- The FRL should provide for a mandatory Debt Management Plan to be prepared over a period of three to five years to ensure achievement of the various targets for prudent debt management;
- There should be a detailed capital budget providing for all capital expenditure forecasts for the state governments;
- The debt sustainability norm as put forth by the Planning Commission should be strictly adhered to. This should be established in the form of a Government Order (GO);
- State governments should ensure that they have details of all information pertaining to their assets, particularly financial assets and liabilities;
- The formats recommended by the Expert Group on Model Fiscal Responsibility Legislation at State Level could be adopted for the purpose with some state specific changes; and
- There should be a system ensured through a rule under a statute for maintaining complete detail of all loans guaranteed by the government as well as all loans for which the repayment liability falls on the government.

### Credit Analysis and Ratings

Credit analysis is a product of the credit market's need to assess state government financial risk, whereas, credit ratings are the leading form of institutionalized credit analysis. Credit analysis and ratings play an important role in expanding state government securities instruments. Credit ratings focus on credit risk (risk of payment default) which then is used to help determine overall risk and reward. A financial market only becomes viable when there is a variety of competing investors, and investments with different risk and reward characteristics. Credit ratings have the benefit of ranking state governments on their perceived ability and willingness to pay their debts and avoid financial stress. Credit ratings are relatively easy to understand, hence their popular appeal with institutional investors in the capital market. The broad-based appeal of credit ratings represents a catalyst for state governments, providing an incentive to upgrade one's credit rating.

### Other Issues

A regular and universal reporting system for state governments founded on an accounting system (modified accrual) relevant to the information needs of investors and prepared by properly trained officials is a prerequisite for market development. Most important is the ability to report direct and contingent debts outstanding, current state debt service requirements and cash funds available to meet these demands as well as baseline operating expenses. While the ability to support many other measures of performance and conditions is desirable, reliable baseline data on pending state debt obligations and reporting needs are indispensable to developing the state debt securities market.

## Part 4:

# Remaining Gaps and Prioritizing these Gaps

The effect of fiscal rules that limit debt finance is meant to curtail inappropriate behavior of state governments that push costs to future generations who have little option but to pay them. The effect of these rules is to reduce the role of debt finance to redistribute tax burdens across generations and to smooth tax burdens. Clearly, trade-offs are encountered in determining a fiscal rule that provides incentives for public investment while discouraging excessive debt finance. Any rule must balance these considerations. This section briefly reviews some policy and pragmatic issues that Indian state governments must review, in providing more effective debt management and capital investment policies.

## Debt and Fiscal Policy Issues

The golden rule for public investments as advocated by the Government of India (GoI)—budget balance for operational accounts, including depreciation and interest expense, and debt finance for public investment, potentially imposes several distortions in public decision making. Specifically, from a public policy perspective the following points of criticism may need to be addressed:

1. **Distortions in the Choice of Capital Projects**: Under the golden rule, debt finance could be used for capital expenditures that can be commercially valued so that asset disposals can sustain debt levels. Those investments that cannot be valued would be subject to the balance-budget constraint. While compared to the cash balance rule that discriminates against public investment spending, several distortions in public decision making remain—potentially leading to too much public investment spending.

a. **The sustainable debt view** for deficit finance would limit capital budgeting to assets only sold in markets (building and perhaps roads and bridges that can be tolled and/or privately run) or operated as a public private partnership. When debt finance is limited to commercial capital assets, other types of public capital expenditures would be included in the operational budget. If fiscal constraints, such as balanced budget apply to only the operational budget, then public sector investment decisions are distorted to the extent that only commercial activities are left off the operational budget and can be debt-financed.

b. **If capital expenditures are taken off the budget** (e.g., school buildings) but other inputs used in production are subject to fiscal limits (e.g. ,teacher salaries), production techniques could be distorted in favor of capital intensity (i.e., teaching by computer rather than by people).

c. **Capital expenditures that have unknown depreciation rates** are typically expensed (such as employee training). If public tangible expenditures such as employee training is expensed and subject to fiscal limitation, then investments in other assets such as tangible capital like (for example) military equipment is more favored if financing is not subject to fiscal rules for the operational budget.

d. Debt financed capital expenditures that would be subject to fiscal constraints may be important for intergenerational equity and tax smoothing objectives. However, clearly a trade-off exists from the need to ensure the financing of public investments with the desire to limit bad government behavior that might result in excessive spending and debt. The type of fiscal and debt rule used becomes important in this context.

2. **Valuation Distortions:** Even if public capital can be measured using the typical valuation techniques that are often used in the private sector, the valuation may be distorted. For example, the use of historical prices (such as equipment, land and buildings) would imply that depreciation of capital goods is underestimated. With debt finance limited to the estimated value of capital, historical valuations would put some additional constraint on investments, especially in countries with high rates of inflation. Finally, contingencies such as those related to public-private partnerships would be valued as debt and hard to estimate, leading to incorrect valuation of a state government's asset and liability position.

Given these difficulties, it is not surprising that some other potential fiscal rules should be considered to provide an opportunity to limit poor state government behavior and to provide better incentive for public investment decision-making.

3. **Debt Financing of Self-liquidating Assets:** Based on sustainability and tax smoothing considerations, a case can be made for debt financing of capital projects that generate commercial or self-liquidity assets, or which will generate revenues from user fees that will ultimately recoup initial outlays. While capital budgeting is appropriate for self-liquidating assets, other types of capital expenditure should be included in the operational budget. This does not mean that commercial investment projects should be financed fully be debt. Some portion of capital expenditures should remain tax-financed for financial reasons. With economic uncertainty, asset values change. Lenders are willing to provide debt financing for only a portion of investment costs to ensure that their principal and interest will be repaid over time. This suggests that limitation may be imposed on the capital assets that can be debt financed.

## Ongoing Issues

The nonavailability of an accrual based accounting system at the state level fails to enable states to provide a clear picture of the financial position of the state governments. While the TFC through its recommendations has tried to reward the better performing states with debt write-offs. Debt write-off measures recommended by the TFC have been related to bringing down the revenue deficit to zero and fiscal deficit below 3 percent over a stipulated period. It would be possible for state governments to defer committed expenditure and generate surplus on the revenue account to avail these write-offs. This has become possible due to the existence of a cash-based accounting system. Documenting and bringing changes in accounting policies (e.g., accrual accounting) and disclosure norms by the various state governments to the public domain would enable most state government bond investors to be more informed.

There is an ongoing lack of detailed information pertaining to guarantees issued by state governments to facilitate borrowings by the Special Purpose Vehicles that are not constrained by the provisions of Art. 293 (4). Often there are no budgetary provisions made for the guarantees issued by state governments. It is very difficult to capture such information in the absence of an accrual based accounting system. Having expressed the above concerns, it becomes very important to understand how far a true ratio analysis would be useful and relevant in the context of a subnational entity in India.

A strict sense corporate rating may not be very useful and relevant for a subsovereign entity. Under such circumstances, it is very important to understand the risks involved in subsovereign borrowings. It is equally important to know what makes a state government solvent and whether solvency does ensures credibility. Solvency may or may not necessarily imply creditworthy. A cash surplus subsovereign entity may or may not be a sustainable debt repayer. It would depend to a large extent on the nature of existing responsibilities of the entity and the nature of future commitments.

## Hands-on Issues: Debt Management Issues

Future debt, guarantee, and investment work should be concentrated on just a few areas:

1. **Risk Management**—Establishing risk (debt) management analysis and evaluation with respect to debt and state government investments;

2. **State Government Investment**—Work has been done on investment—most notably GoK has taken the investment manual, established an investment (government equity) unit, but Jharkhand and Uttaranchal still need additional assistance in moving this forward and mainstreaming the reporting and internal procedures; and

3. **Debt Investment Management Cell**—Karnataka is pretty much on their way with DIMC. Jharkhand and Uttarakhand are lagging but doing the best that they can especially when taking resource and other constraints under consideration. Mainstreaming of internal debt, guarantee and investment management procedures should continue.

**A strict sense corporate rating may not be very useful and relevant for a subsovereign entity. Under such circumstances, it is very important to understand the risks involved in subsovereign borrowings. It is equally important to know what makes a state government solvent and whether solvency does ensures credibility. Solvency may or may not necessarily imply creditworthy. A cash surplus subsovereign entity may or may not be a sustainable debt repayer. It would depend to a large extent on the nature of existing responsibilities of the entity and the nature of future commitments.**

## Similar Subnational Debt Reform Interventions in India: Recommendations

If REFORM states can be taken as a representative sample of Indian state government debt management practices, the following gaps from best practice may occur:

### Staffing and Training

- Inadequate number and specialization of staff.
- Staff members may need training in debt monitoring and debt management procedures.

### Data Coverage

- There may be inadequate information on creditor, borrower, and sectoral allocation.
- Payment dates may only be available to the month they fall due, not to the exact payment date.
- Inadequate information on market borrowings.
- Inadequate records are kept on guaranteed loans.
- Nonguaranteed loans of enterprises that seek guarantees are not recorded at all.

### Computerization

- There is no comprehensive system to accommodate the various debt instruments or guarantees for which data should be maintained.

As such, the following ***change strategies*** are recommended:

### Extend Data Coverage

- Data on all loans should be maintained in a computer system (*e.g., CS-DRMS*), where they can readily be aggregated. The data for each loan should include:
  - Descriptive information, such as borrower, lender, sector for which loan is designated, and so on, in order to provide information for analytical purposes.
  - Terms information, such as amount, maturity and grace periods, interest rate or rates, frequency and dates of payments.
  - The anticipated draw down schedule—this would be modified as necessary to provide an accurate projection of inflows from the loan.
  - Information on future drawings should come from the Planning Department, together with staff involved on the specific project using the loan proceeds.
  - Schedules of payments, which should be automatically generated by the computer.
  - The computerized data would be maintained by the staff of a debt unit, who would be trained to be knowledgeable on debt management techniques. Coverage should be increased to include all loans to the State, all loans guaranteed by the State, and all loans of enterprises to which the State extends guarantees.
  - Reporting should be enforced under the terms of the proposed new debt act and subsidies and new guarantees should be withheld from enterprises that fail to comply.

### Modify Organizational Structure and Staffing

- Increasing the coverage of debt data maintained would mean that staff could concentrate on specific types of debt.
- The anticipated initial staff allocation would be: (i) one head of debt unit, who would supervise the other staff of the unit and would be capable of providing help with any of the functions and would be available to cover other staff at times of extra workload. Head of cell would also coordinate transfer of information to analytical, budget and accounting units;

(ii) one staff member to maintain records on guaranteed debt and the debt of corporations. The staff member would also make periodic visits to enterprises to verify amounts from time-to-time; and (iii) one staff member to maintain records on other loans: direct loans from the Government of India and the Approved Institutions, such as the NABARD.

### Provide Training to Implement Improved Debt Management

- Start training staff in basic aspects of debt monitoring such as the forms of loans, data that should be maintained to provide analytical and statistical information, the links between loan data and accounts. Subsequently, introduce the concepts of more complex debt instruments and analytical aspects of debt.